CHAPTER TWO
Reading Comprehension Strategies in an EFL Context:
Literature Review and Theoretical Constructs

2.1. Introduction

Reading is a complicated cognitive skill that includes getting information from the text, reading between the lines to infer what is not overtly stated, and moving beyond the obvious connection between the elements of the script to get meaning by clarifying the message from various points of views and aspects. Reading without comprehension or understanding a text is not what can be called efficient reading. Comprehension is the goal of reading, but it can be a difficult skill to master, especially for learners of English as a foreign language. Reading comprehension includes constructing meaning from the text and decoding the writer’s words by using background knowledge. The perspective on reading as an active psycholinguistic process became popular in the early seventies with Goodman’s (1967) psycholinguistic model on reading. Goodman (1967) claimed that reading is a psycholinguistic guessing game. In his model Goodman rejected the view that reading is an exact, detailed, sequential perception that requires identification of letters, words, spelling patterns and large language units. Goodman’s theory of reading changed the traditional views of researchers about ESL/EFL reading processes. Goodman (1988) defines reading thus: ‘Reading is a receptive language process. It is a psycholinguistic process in that it starts with a linguistic surface representation encoded by a writer and ends with meaning which the reader constructs. There is thus an essential interaction between language and thought in reading. The writer encodes thought as language and the reader decodes language to thought’ (p. 12).

Working from the perspective of cognitive and meta-cognitive theories of reading, this study explores ways of helping learners become independent readers by explicitly teaching them reading comprehension strategies and improving their level of awareness about strategy usage. The study is based on the premise that most teachers and students in
the Iranian EFL context neither know about reading comprehension strategies nor get any training in strategy use, as a result of which they obtain poor marks in reading.

The purpose of this study is to determine the impact of explicit teaching of the reading comprehension strategies on intermediate EFL learners in Gilan province in Iran. This chapter presents a review of literature which focuses on reading comprehension strategies and motivation of learners in an EFL context.

2.2. Reading comprehension strategies: A brief overview

‘Comprehension strategies are effective working hypotheses about the correct meaning and structure of the text. Strategic analysis depends on characteristics of the language user and texts and need to be learned’ (Van Dijk & Kintsch, 1983, p. 11). Comprehension strategies include cognitive and meta-cognitive strategies that readers use to accomplish the goal of comprehension. These strategies are interrelated and are usually used in combination with other strategies. Cognitive strategies are mental processes involved in achieving a goal in reading a text. These strategies help the reader to understand what is being read. ‘Meta-cognition is thinking about thinking’ (Livingston, 1997, p.1). Meta-cognitive strategies are the mental processes that help the reader to think about the process of reading and check how the reading is progressing. In other words, meta-cognitive strategies monitor and assess the ongoing performance in understanding what is being read. Good readers use meta-cognitive strategies to think and control the pace and process of their reading.

Lau and Chan (2003) differentiate between skilled and unskilled readers thus: ‘Skilled readers know how to use effective strategies to facilitate the functioning of various cognitive processes and construct meaningful understanding of the text, but poor readers simply read the text word by word without using any strategies’ (p.177). Poor readers thus do not have the tools to use comprehension cues that are part of the text, to overcome the barriers of comprehending the text.

Inadequate strategies and insufficient participation in the reading process by readers cause comprehension problems even among readers who have enough knowledge of vocabulary and decoding techniques. Good readers have a purpose for reading; they may
read for information or read for pleasure. Good readers are usually aware of reading strategies and use these to constantly monitor the process of reading. In addition, good readers have been found to deliberately choose and organize the particular reading comprehension strategies to make up for their lack of comprehension and cognitive activities during the process of reading. Reading strategies are ‘actions that readers select and control to achieve desired goals or objectives’ (Johnston & Byrd, 1983; Paris, Lipson & Wixson, 1983; Vandijk & Kintsch, 1983; in Carrell, Gajdusek & Wise, 1998, p. 97). Strategies are deliberate actions. ‘The term ‘strategies’ emphasizes the readers’ active participation and actual way of doing something, or the readers’ performance’ Alatis, 1992, P. 167). Strategies are actions selected deliberately to achieve particular goals’ (Carrell, Gajdusek, & Wise, 1998: 97-98, Carrell, Gajdusek, & Wise, 2002: 230) Research has shown that strategy instruction improves comprehension of the text (Palincsar & Brown, 1984).

Duke and Pearson (2002) say that results of research in reading comprehension reveal that instruction of reading comprehension strategies can train good readers to read independently in the future. They also suggest a ‘model of comprehension instruction’ consisting five components to the instructors as following:

1. An explicit description of the strategy and when and how it should be used.
2. Teacher and/or student modeling of the strategy in action
3. Collaborative use of the strategy in action.
4. Guided practice using the strategy with gradual release of responsibility.
5. Independent use of the strategy.

Reading comprehension strategies can be classified into three different kinds of categories based on the time and place in which they are used in the reading process: pre-reading strategies, while-reading strategies and post-reading strategies. Each stage and phase requires the readers to use particular kinds of reading strategies. Pre-reading stage is a vital stage in which teachers can use reading strategies to activate their students’ schema. Marinaccio (2012) believes that ‘it is vital that teachers give information about the text, activating students prior knowledge to increase their comprehension is more than giving them a short summary. Students need to be engaged and associate the information to their
schema. Students who are not able to connect to the topic before reading will have no previous knowledge and therefore be unable to comprehend the book at the same level as students whose prior knowledge is activated’ (p. 3).

One of the reading comprehension strategies that efficient readers use to overcome comprehension barriers in the text include being aware of the purpose for reading and realizing when something is not making sense. While reading, efficient readers use several strategies such as making predictions, skimming and scanning, guessing meaning from the context, asking questions, visualizing and making mental pictures of what is being read, drawing on prior knowledge and understanding story structure. Efficient readers are also able to infer meanings that are not overtly stated in the text, distinguish between main ideas and supporting details, summarize what is read and monitor the reading process.

These strategies can be taught; when students are consciously able to use reading strategies and monitor their reading progress, they become efficient readers. Explicit teaching of reading strategies help students follow a text more closely, and assist them in identifying important events and concepts in the text. This in turn makes students more motivated to read, both inside and outside the classroom. Purposeful and active readers are able to use a range of strategies to understand and comprehend the text at different levels, ranging from decoding unknown words, using phonemic and morphological knowledge to identifying difficult areas. In short, understanding a text is a complex cognitive skill, and reading strategies are useful tools which could aid the cognitive process of comprehension, allowing students to extract meaning from the text by connecting from the information in the text to their prior knowledge.

2.3. Reading comprehension models

In this part, I briefly will review three reading models- *bottom-up, top-down* and *interactive* - that originate from first language reading research, but find a resonance with reading strategies in a second language, like the context of this research. Reading is a vital skill for educated learners of a foreign language. Research by Bernhardt (2011), Cummins (1991) affirms that L1 and L2 reading ability are related. Consolidating research data from Chiappe, Siegal, & Gottardo, (2002); Geva, (2006); Geva, Yaghoub-Zaheh, & Schuster,
(2000), Grabe, (2009), Cruz & Escudero (2012) add that ‘it has been found that reading strategies and meta-cognitive strategies developed in the L1 can assist L2 reading’ (p. 2).

Many researchers of EFL context have used the three models of bottom-up, top-down, and interactive as reference and source of explanation of EFL reading procedure in their research (for example Alsamadani, 2008; Ahmadi, Ismail, & Abdullah 2013; Mehrpour & Rahimi, 2010; AhmadvandpourTorki, Bagherzadeh, Kasmani, & Valipour, 2014; Masoumi, Khodabandehlou, & Jahandar, 2013; Zare, 2013; Shang, 2010; Salmi, 2011; Mourtaga, 2006; Tabatabaian & Zabihi, 2011).

Each of these three models describes the strategies readers use to obtain meaning from the text. The bottom-up model, for instance, is driven by the idea that for getting meaning from the text readers decode each word in the text. The top down model, on the contrary, says that readers obtain meaning from the text by making use of their experience and prior knowledge. The third model – the interactive model – suggests that the reader goes through the text by making use of reading comprehension strategies, text information, and the readers’ previous knowledge as a means for obtaining meaning from the text.

2.3.1. The bottom-up model

‘A bottom-up reading model is a model that focuses on a single-direction, part-to-whole processing of a text. In these models, the reader decodes the text which has been previously encoded by the writer’ (Shahnazari & Dabaghi, 2014, p. 9). ‘Bottom-up processing models place primary emphasis on textual decoding. They can be seen as data-driven and emphasize the priority of the text as input and, hence, lower-level process such as letter and word recognition’ (Chun & Plass, 1997, p. 62). The bottom-up model focuses on linguistic clues and builds meaning from literal comprehension of a text. This model shows that readers try to get meaning based on information existing in the text.

Bottom-up models of reading hypothesize that learning to read a text proceeds by understanding the smallest parts of language and gradually moving towards understanding the whole text. Nunan (1991) refers to reading through bottom-up processing as a way in which the reader gets the meaning by decoding a series of written symbols of the text into her aural equivalents. This view assumes that meaning exists in the text and the reader has
to decode it, and then internalize it. This reading model mostly focuses on structure and words as a major source of contributing meaning to the text and reading. It does not take into account other features like readers previous knowledge, social interactions, the role of the brain in processing, background information, and readers own ideas and experiences.

2.3.1.1. The model and reader

According to Cruz & Escudero (2012), ‘The recognition of individual letters underlies a phonics approach to reading. A phonics approach consists of teaching sound-letter correspondences to children so that they can accurately perceive and decode words. The Bottom-up model is text driven in which comprehension issues from decoding letters, words, and so on. Bottom-up processing is involved in the creation of an accurate text-base (meaning). The model assumes that some sequential, linear parsing of lexis and syntax is needed to create an accurate representation of a text rate’ (p. 6).

The bottom up model is a word-for-word and discrete item reading which only has one text-based option. Word-for-word reading, whether as translation or transliteration of synonyms, poses practical, purely functional problems for the foreign-language reader. Therefore, deficiencies in bottom-up processing disrupt comprehension. Moreover, when the focus of a student’s attention is on surface details rather than communicative substance, translation encourages dictionary dependency and word-for-word reading habits. A learning focus on precise matching of semantic, morphological, and syntactic features undermines reading strategies such as ‘chunking’ or skimming and scanning, which are techniques of successful readers, in both foreign and native languages. It is believed that reading word for word with a dominant focus on vocabulary or formal features rather than textual message is an inadvertent by-product of second- and particularly foreign-language instruction. Initial texts in EFL are simplified, making it easier to practice bottom-up processing at the word and sentence level to the exclusion of other strategies.

In Iran, English is a foreign language and students have little or no language input outside the classroom (Swaffar, Arans, & Byrnes, 1991). They thus use a bottom up reading model. Reading a text in this model is word-based, so readers have to build meaning of a text by decoding every word and sentence in the text. Contextual knowledge
and higher-order processing strategies do not have a significant function in reading and understanding a text in this model (Dechant, 1991; Koda, 2005).

Each single word has a specific value; therefore, fast distinguishing of words is a necessity to the bottom-up approach. For readers who do not have suitable L2 word knowledge, lack of proficiency interrupts and stalls their pace of reading, which makes them end up as slow and struggling readers. It is believed that the connection between readers’ word knowledge, text and brain function in reading L2 is in such a way that readers with less word knowledge will need more time and effort to decode words in the print; consequently, they will have less working capacity in the brain for reading comprehension. In contrast to struggling readers, proficient readers identify sight and affixed words fast. In other words, ‘the bottom-up processes involved in word recognition become automatic over time for skilled readers’ (Griffiths, Sohlberg, & Biancarosa, 2011, p. 6). As a result, they can allocate more short-term memory space in the brain for functioning and processing of reading comprehension task.

2.3.1.2. Drawbacks of the model

‘A bottom-up reading model is a reading model that emphasizes the written or printed text, it says that reading is driven by a process that results in meaning (or, in other words, reading is driven by text) and that reading proceeds from part to whole’ (Liu, 2010, p. 154). ‘In bottom-up reading model, the readers usually use their knowledge of lexical items, structural points and phonological patterns to decode the text meaning’ (Hosseini Fatemi, Vahedi, & Seyyedrezaie, 2014, p. 686).

When readers use the bottom-up processing for covering a text they may come across ‘linguistic difficulties, such as being unfamiliar with a particular word or grammatical structure’ (Lally, 1998, p. 272). ‘Another problem with the bottom-up model of reading is that it does not seem to consider the contribution of the context or the readers’ background knowledge to reading comprehension. Going beyond the printed letters seems to receive little or no attention in this model.’ (Alsamadani, 2008, p. 34).

The bottom up model of reading describes a word-by-word decoding process that makes the reader lose their speed during the reading process. In addition, the model implies
a sort of slow, very careful reading with attention to details of the text that may cause excessive loading of short-term memory such that readers fail to remember what they have read at the end of the text.

As other models and discussions of reading comprehension show, reading in this style does not lead to an integrative and critical mode of thought on the part of the reader. The primary stress in this model is word recognition and knowledge of phonics (Ou, 2006). By using bottom-up reading strategies, readers go through a linear procedure of decoding the text i.e. first they process letters as an integrative whole (word) and then they string and tie the words together to understand a sentence. Thus, readers may only remember discrete facts and information, which in turn would make it difficult for them to integrate these into a cohesive understanding of the text.

‘An important shortcoming of this model is the fact that it is difficult to account for sentence-context effects and the role of prior knowledge of text topic as facilitating variables in word recognition and comprehension’ (Abisamra, 2014, p. 7). ‘This model weakens the significance of reading comprehension because the focus is on the understanding of linguistic knowledge but little attention is paid to schema, i.e. related cultural background in the whole text’ (Al Salmi, 2011, p. 703). Involving prior knowledge in reading a text will help the learners to understand it better, because they have a foundation to build on and put the new information and start processing it.

The bottom-up model emphasizes recognition of the graphical input as the major principle of reading a text, Therefore, language learners such as Iranians, Japanese, Chinese, and Arabs (here, English) whose languages do not have the same orthographic system of the target language, may face problems in recognition of words in reading a text (Coady & Huckin, 1997). Thus ‘a learner who knows only Indo-European languages, for example, and starts learning Chinese will find it difficult to relate anything to his previous linguistic knowledge’ (Ringbom, 2007, p. 7).

Another drawback on the model is that ‘bottom-up models are not useful at the advanced levels because students are able to decode graphical input automatically’ (Škudienė, 2002, p. 94). Advanced readers can decode graphical input (i.e. words on a page) automatically (i.e. the ability to read words without having to think about their
meaning at a conscious level, so the mind is not occupied with the details of covering words).

‘Automaticity occurs when the reader is unaware of and not consciously controlling the process. If they do not recognize enough words rapidly and accurately, too much time and effort is expended in attending to graphic form, leaving them word-bound’ (Garb, 2001, p. 37). Automaticity allows readers to focus more attention on comprehension rather than on decoding individual words. If readers are too attentive to the task of processing the text in details and micro-level, their working memory may not have the chance and capacity to keep the track of events in discourse level as a whole text.

To sum up, using only a bottom up reading model limits both comprehension and speed, leaving second language readers struggling to understand a text. L2 teachers who resort to teaching their learners bottom up processing do not help their students become efficient readers for several reasons. First, a bottom up model implies that concentration on vocabulary is the correct way to understanding a text in the second language, and that having a good command of vocabulary alone is adequate for efficient reading of a text in the second language at the cost of exclusion of techniques and strategies. Therefore, ‘it is not possible to make use of higher-order reading skills such as making inferences, and consequently, background knowledge plays virtually no role in deriving and interpreting the meaning of the text in this model’ (Shahnazari & Dabaghi, 2014, p. 10). Secondly, using a bottom up approach to reading makes a reader understand only the surface details of a text; the deeper layers of meaning are left undiscovered. Moreover, this kind of reading makes frequent demands on the reader to resort to a dictionary repeatedly and word for word translation, which in turn hinders continuity, comprehension, and pleasure in reading. Thus, teaching L2 students a bottom up approach to read is inadequate as a means of making them independent readers. As the next sections will show, other models of reading need to be used in conjunction with the bottom up model to develop reading comprehension strategies in L2 learners of English.
2.3.2. The top-down model

Contemporary research into cognitive views of reading and comprehension has tried to explain what happens when a reader begins reading. ‘A top-down reading model is a reading approach that emphasizes what the reader brings to the text, it contends that reading is driven by meaning and proceeds from whole to part. It is also known as concept-driven model’ (Liu, 2010, p. 154).

The cognitive view believes that as a reader starts reading and processing a text, a kind of continuous interaction occurs between the reader and the text. In the top-down model, the readers’ background knowledge and anticipation direct them to construct meaning from a text. Eskey (2005) says that reading processing starts from brain to text. ‘The reader constructs meaning from written language by using graphophonic, syntactic, and semantic system of language but he or she merely uses cues from these three levels of language to predict meaning, and, most important, confirms those predictions by relating them to his or her past experiences and knowledge of the language’ (Carrell, 2000, p. 2-3). Smith (2004) a proponent of top-down or (inside-out, his terminology) says top-down ‘implies that the reader determines how a text will be approached and interpreted’ (p. 234). The reader, the active agent, tries to make sense of the print by relating it to everything else that she already knows by making hypotheses, predictions and interpretations about the print (Smith, 2004). Rumelhart (2013) puts reading and the reader role as following: ‘reading is a ‘perceptual’ and a ‘cognitive’ process. A skilled reader must be able to make use of sensory, syntactic, semantic, and pragmatic information to accomplish his/her task’ (p. 719).

The top-down model promotes the importance of prediction, and guessing meaning from context. Readers use this model consciously to interpret and infer the overall intended meaning from the text. In other words, in this model, readers approach the text from a wider perspective, analyzing the text as a whole, connecting it to their prior knowledge, and using this to explore the layers of thought in the text. In the top-down model the readers construct their own meaning, i.e. their own version of meanings of the text which differs from reader to reader. The top-down reading model thus suggests that readers concentrate
more on understanding the main ideas of a passage rather than understanding every single word in the text.

In top-down strategy, ‘content schemata’ are to be activated; prior knowledge plays a major role in learners’ comprehension (Lee, 2009, p. 182). In other words, the top-down reading model suggests that the meaning of the text is created by the reader by adapting it into his or her existing schema. Readers use their prior information to make connections between the newly received data and their earlier experiences. As they read and test the new text against their own repertoire of knowledge, they make hunches, propose hypothetical suppositions about the meaning of the text, and try to validate and justify their hypotheses. Using a top-down model thus encourages the readers to use their social knowledge, vocabulary knowledge, and background knowledge to make guesses and predictions while reading.

However, the top-down model ignores the role of text and its concepts in favor of an over-reliance on the readers’ schema (background knowledge about the topic of the text) and linguistic knowledge. A major drawback with regard to application of top-down processing model is that decoding skills are greatly neglected due to the fact that in this model the prime emphasis is on making meaning from the text using background information or contextual cues (Eskey, 1988). Samuels and Kamil (2000) say that ‘one of the problems for the top-down model is that for many texts, the reader has little knowledge of the text and cannot generate predictions. A more serious problem is that even if a skilled reader can generate predictions, the amount of time necessary to generate a prediction may be greater than the amount of time a skilled reader needs simply to recognize words in a text than to try to generate predictions’ (p. 32).

‘Our understanding of a text depends on how much related schema we, as readers, possess while reading. Activating prior knowledge before reading helps students get ready to read and become open to new information. It focuses students’ reading and helps them read for a purpose’ (Alfaki, & Siddiek, 2013, p. 43). Analyses of EFL reading comprehension sessions show that most of the time students do not have the required necessary background information to relate to the new text easily. This may be because reading texts are from a different culture, the vocabulary is unfamiliar, or the content is not
appropriate to their age or knowledge of the world. In such a situation, they have no option but to resort to and take recourse in bottom–up processing that is, decoding the meaning of a text by trying to understand the meanings of individual words and sentences.

2.3.3. The interactive model

As seen in the above section, the bottom-up model of reading describes a view of reading as a decoding procedure in which the reader reconstructs the writer's intended meaning through the smallest textual components – words and sentences. In the bottom-up model, ESL/EFL readers’ problems in comprehension of a text are related to decoding problems of smallest textual units. Reading texts are usually loaded with complex language structures, words and unfamiliar cultural points which often create problems in comprehension of the text for the learners. According to top-down model, there is an interaction between reader and text, and the reader is an active participant in the process of reading the script.

‘The interactive nature of reading is especially underlined by interactive models that explain reading comprehensively. Within the interactive models, both interaction between the reader and the text and the one between bottom-up and top-down reading processes are highlighted. Therefore, it would not be wrong to state that an individual should apply both bottom-up and top-down processes for an active reading; in other words, s/he should employ strategies that would help not only decode the knowledge in the text but also relate his/her background knowledge to the text and interpret the text’ (Gurses & Adiguzel, 2013, p. 55).

‘An interactive model is one in which data driven, bottom-up processing combines with top-down, conceptually driven processing to cooperatively determine the most likely interpretation of the input. To put it simplistically, processing in an interactive model of reading proceeds in the following way: the reader begins with a set of expectations about what information is likely to be available through visual input. These expectations, or initial hypotheses, are based on our knowledge of the structure of letters, words, phrases, sentences, and large pieces of discourse, including non-linguistic aspects of the current contextual situation. As visual information from the page begins to become available, it
strengthens those hypotheses that are consistent with the input and weaken those that are inconsistent. The stronger hypotheses, in turn, make even more specific predictions about the information available in the visual input, to degree that these hypotheses are confirmed, they are further strengthened, and the processing is facilitated’ (Rumelhart & MCclelland, 1981, p. 37).

Chang (2005) states that ‘the interactive model stresses the entire reading process and centers the learning process on interaction. Through strategic use of top-down and bottom-up models in the interactive model, the deficiency in linguistic knowledge can be compensated with skills used in the top-down model, which then enhance ones lower-level processing capability for further inference in the top-down model’ (p. 8).

Milkulecky (2008) explains the process happening in interactive model as ‘the reader is constantly noticing parts of the text and comparing that sample with what he or she already knows. The reader uses background knowledge, knowledge about language and literacy, cultural values, and beliefs [then] he samples the text, the shapes and sounds of the letters, the meaning of words/phrases, and grammatical information instantaneously and usually unconsciously compares what he or she notices in the text with what he or she already knows, trying to find a match. The textual information activates prior knowledge, which in turn activates expectations about what is in the text. This primarily unconscious interactive process continues until the reader is satisfied with the match between text and prior knowledge’ (p.1).

Stanovich (1980) is one of the researchers who has worked on the Rumelhart’s interactive model. In his interactive-compensatory model he introduces a new characteristic to Rumelhart’s model by proposing that weakness in processing one stage can be covered and supported by the strength in another stage. He proposes that problems in top-down and bottom up reading models can be decreased through employment of his suggested model. In other words, using bottom-up models does not let a reader apply higher-level processing strategies to impact lower-level processing strategies. Therefore, in a situation where a reader does not have enough information about the topic of the text, the top-down model will not be useful for the reader, so she cannot produce predictions with regard to topic of the text. Stanovich (1980) adds that ‘Interactive models assume that a pattern is synthesized
based on information provided simultaneously from several knowledge sources. The compensatory assumption states that a deficit in any knowledge source results in a heavier reliance on other knowledge sources, regardless of their level in the processing hierarchy’ (p. 63).

According to the interactive model, therefore, readers simultaneously use and involve their deep structure system -- the thinking, and knowledge-based-variables (top-down). They use vocabulary knowledge, background knowledge and social concepts and relationship with the sensory-text-based (bottom-up) which uses knowledge of letter-sound relationship, lexical or word knowledge, syntactic or contextual understanding to get meaning from the text. Liu (2014) summed this up by stating that readers build meaning by choosing knowledge from ‘all sources of meaning, i.e. phonemic, morphemic, syntax, and semantics without adherence to any one set order’ (p. 1088).

It is believed that utilizing the interactive model in reading will give the reader a chance to apply several reading- skills such as a) using prior knowledge, b) predicting - what might happen next in the text, c) previewing vocabulary prior to reading, d) investigating new/less familiar words and making own dictionary, e) constructing an image - visualizing, f) questionmaking, g) summarizing - finding the main idea, skimming and then summarizing sentences, h) investigating characters’ feelings, i) Comparing and contrasting, j) finding main idea and details, k) drawing conclusions and l) making inferences-interactively for processing and interpreting a text. ‘This model suggests that a skilled reader simultaneously synthesizes the information available to him or her from several knowledge sources of either bottom-up or top-down during the reading process’ (Wang, 2009, p. 44).

Using the interactive model, a reader can shift between bottom-up and top-down skills when there is difficulty in comprehending. For instance, when a reader cannot build up meaning by using the appropriate content schemata (related with the content area and cultural knowledge) she may utilize bottom-up processing (by word to word analysis of the text to find the meaning from the text) to make up for the missing knowledge. Similarly, when a reader lacks the bottom-up skills necessary to comprehend a text, she can resort to top down processing to obtain the required meaning.
Research thus suggests that the interactive model is more effective than other models for the following reasons:

a) This model allows the readers to bring their own background knowledge and experiences to the reading of a text.

b) This model combines both top–down and bottom-up strategies that could provide the opportunity and scope for students to utilize their preferred strategies for decoding and interpreting the text.

c) Interactive model stresses the active role of the teacher and the students, and the teachers modeling of the process of reading is considered an important factor for improving reading ability of the students.

d) The model believes that activating the readers’ critical thinking and connecting the text to the real world and schema is an important part of the reading process. In the model, there is also a role for reading aloud, which is believed to enhance reading efficiency by helping readers learn how to think aloud and be aware of the process of their reading.

e) The interactive model describes a process where readers use different strategies in their reading process simultaneously in three separate but integrated levels of comprehension, which affect each other like an inter-disciplinary mechanism and tool for reading comprehension: sentence level, propositional level (obtaining gist of the idea from the text), and situational level (going beyond the literal meaning of the text by making use of prior information).

To sum up, the three models of bottom-up, top down and interactive model are very important in the field of reading comprehension teaching. A bottom up model stresses on moving from part to whole, i.e., from word to sentence to paragraph level, which is considered uni-directional. The bottom-up model is as just important as top-down model in reading comprehension of the text. Pang (2008) surveyed recent empirical studies regarding reading issues in L1 and L2 and concluded that word recognition processing (lower-level) is a fundamental part of L2 reading. He also concluded that word recognition processing is an important asset which is employed by advanced ESL readers in comprehension of a text. He also concluded that syntactic and lexical knowledge are necessary for adopting higher level strategies such as inference in L2 reading comprehension.
A top-down model is cognitive based and meaning driven. It emphasizes what readers bring to the reading of the text for meaning. In a top-down process the reader moves from whole to smallest parts. An interactive model is a constructivist model that uses both bottom-up and top down processing for dealing with a text. In the interactive model there is an interaction between bottom-up and top down processing during processing of a text, where reading is considered an active process that includes interaction between the text, the reader and the reading context. Teachers who adopt the interactive model in their reading instruction take comprehension as the only purpose for reading (Alsamadani, 2008).

The researcher has based the theoretical frame of his research on the interactive model. The interactive model stresses the application of both top-down and bottom-up models during reading a text. Interactive reading involves the reader, text, and the context in which reading takes place in the activity of reading (Hernandez, 2009). Also, the interactive model emphasizes the role of the reader, text and background knowledge to the reading process. Therefore, the researcher believes by employing the interactive model students will learn how to effectively read, evaluate, synthesize, and reflect on the text.

2.4. Explicit instruction of reading comprehension strategies and its efficacy

Reading comprehension strategies range from general strategies such as rereading, to particular strategies such as summarization, or inference. Reading strategies are neither skills nor automatic actions. In order to apply them, readers have to make an effort and control them step by step during the process of reading a text. Reading strategies are ‘actions that readers select and control to achieve desired goals or objectives’ (Johnston & Byrd, 1983; Paris, Lipson & Wixson, 1983; van Dijk & Kintsch, 1983 in Carrell, Gaydusek, & Wise 1998, p. 97). A good reader is a good thinker. Good readers are active, have goals in their reading, continuously appraise their reading, and merge their prior knowledge with the text (Duke & Pearson, 2002). Researchers have tried to find ways to train learners to be better readers in second language learning. It is believed that understanding of the text is as an active process that requires the readers to use their prior information for building new concepts with the help of related schema. In addition, with a
shift from behavioural psychology to cognitive learning, language scholars have tried to explain a new role for readers in the process of reading as active participators that retrieve meaning from texts through meaningful cognitive activities.

In EFL contexts, the chance for EFL learners to read materials in English language is less than learners in English speaking countries, or countries where English is a second language. ‘In a setting where English is a foreign language, students usually learn with low intrinsic motivation; English may be deemed irrelevant (to) students’ needs because the language is not part of their everyday life’ (Koosha, Yakhabi, 2013, p. 3). However, English reading abilities and skills should not be overlooked in EFL classrooms. Reading comprehension strategies should be taught to EFL learners for the following reasons:

a) EFL readers are bound to face breakdowns in the process of their reading. Many EFL students struggle when they read course materials required in class and it takes time for many of them to overcome the difficulties (Zhang, 2001, in Sitthitikul, 2007). Explicit instruction of reading comprehension strategies will help them to be meta-cognitively aware of the nature of their problem. Consequently, they will try to monitor their reading comprehension, identify the cause of their problems and find a way out of the situation by using the appropriate strategy.

b) In order for learning to happen, learners must actively take part in learning activities. Active participation in EFL learning will allow learners to rediscover or rebuild the knowledge that is already a part of their first language experience. However, teaching EFL students a repertoire of reading comprehension cognitive strategies is not adequate to make them good readers; every learner has her own reading style and preferences. Learners thus also need to be taught and motivated to regulate, monitor, and find their own ways of strategy use in different situations. ‘The knowledge of reading in L1 may result in either as a support or interference’ (Sitthitikul, 2007, p. 141). ‘The clear conclusion of (L1 reading versus L 2 language knowledge) studies is that second-language knowledge is more important than first-language reading abilities, and that a linguistic threshold exists which must be crossed before first-language reading ability can transfer to second-language reading contexts’ (Alderson, 2000, p. 39). Therefore, reading strategies learned in EFL students’ L1 may not be transferred to EFL students’ foreign language learning processes.
If EFL learners want to learn more than the grammar and vocabulary of English and become effective readers, they will have to learn and apply strategies during their reading procedure. As discussed through this thesis, due to cognitive, cultural, and linguistic reasons, foreign language reading is a challenging activity to carry out for EFL learners.

Kazemi, Hosseini, and Kohandani (2013) consolidating research from Carrell (1998); Janzen (2003); Paris, Lipson, and Wixson (1983); Pressley (2006) and others state that ‘Strategic reading instruction practices include explaining what comprehension-supporting reading strategies are, and where, when, how, and why they can be used, as well as how they can be adapted to various situations, modeling strategic reading behaviour, and providing feedback on student strategy use by teachers’ (p. 2334).

The argument behind explicit instruction of reading comprehension strategies is that teaching students to use cognitive strategies when they find problems in comprehension of text can improve their reading skills. If EFL students are given the chance to learn and apply reading comprehension strategies and skills, they will be able to read more effectively and easily. For many second and foreign language learners, reading is the most important skill and the main reason for learning English language and reading strategies such as using background knowledge and making predictions play an important role in reading comprehension of EFL and ESL learners (Carrell, Devine, & Eskey, 2000). EFL teachers can help the EFL readers to develop their reading strategies repertoire and metacognitive awareness to enhance their command over their own reading process. Metacognitive awareness will let them to supervise their own reading process and find and solve problems when they face them.

Research results in EFL and ESL reading reveal the benefits of explicit teaching of reading comprehension strategies to the learner. Researchers agree on the importance of:

- strategic awareness and monitoring of the reading process (Zare & Othman, 2013; Sheorey & Mokhtari, 2001)
- Teaching certain reading comprehension strategies to different groups of students Aghaie & Zhang, 2012; Janzen, 2002; Palincsar & Brown, 1984; Salataci & Akyel, 2002). Researchers such as ‘Baker, 2002; Block & Pressley, 2007, 2002; Duke & Pearson, 2002 (agree that) teaching a combination of reading strategies (usually
between four to eight strategies) more than individual strategy instruction improves comprehension and recall of information from texts’ (in Kazemi, Hosseini, & Kohandani, 2013, p. 2336).

Other researchers have also commented on the advantages of explicit instruction. Fan (2010) states that developing learner strategic reading needs gradual, developmental explicit instruction and modeling of the strategies by the teacher. He also adds ‘(Multiple) comprehension strategy instruction which focuses on teaching reading strategies to students to help them become strategic readers and more self-regulated learners seems not only promising but also necessary’ (Fan, 2010, p. 19).

The National Reading Panel (2000) report suggests explicit instruction of reading comprehension strategies and advantages of involvement of strategy training to the learners. According to research results by Mahdavirad (2013) the language teacher should teach a wide range of language learning strategies in order to meet the learners’ different learning styles and strategy preferences needs. Also, according to research result by Khonamri and Karimabadi (2015) explicit teaching of collaborative strategic reading positively affects the learners reading ability.

As the literature on explicit instruction shows, this kind of instruction provides a clear description of the task and encourages students to pay attention to the task at hand. It also breaks the task at hand to small parts and steps and provides a chance for the learners to activate their schema with adequate practice throughout each step.

Research studies (referred to above) have shown that explicit teaching of reading comprehension strategies and involving learners in interaction with texts improves learners’ reading comprehension ability. In addition, making use of reading comprehension strategies helps all learners, particularly poor readers, by boosting their capacity to retain information in the text. Using comprehension strategies can compensate for learners’ comprehension deficiency and trigger their ability to think critically about the text at hand. Teaching reading comprehension in Iran’s schools or universities is practiced in the traditional method of translating text to Persian. Results of interviews with the students in Mehrpour,
Sadighi, and Bagheris (2012) study regarding strategy use revealed that the majority of the students were not familiar with the concept of strategy and application in both L1 and L2.

In sum, teaching reading comprehension strategies helps the students to become strategic readers and more self-regulated in reading sessions. Explicit teaching of reading comprehension strategies involves describing the strategy and its purpose, modeling its use, explaining how to perform it, providing feedback to the learners, strengthening the learners’ ability to use them and encouraging the continuity of applying them on various texts to the learners. Explicit teaching of reading comprehension strategies ‘focuses on a strategy, practice, or particular aspect of the reading process, calls to conscious attention what is being taught, and strives to clarify for students the expectations we have for their learning’ (Serafini, 2004, p. 3). Moreover, explicit teaching of reading comprehension strategies is the intentional and planned activities that an instructor performs in a reading session to make language learners conscious of the reading process and the significance of activities that help the learners to monitor their reading. In other words, explicit instruction of strategies helps the learners to know why, where, how and when to use strategies while reading different texts.

2.4.1. Teachers’ responsibility and role

Different researchers have tried to propose methods and techniques for explicit teaching of reading comprehension strategies. In this section some of the most important discussions will be presented. Singhal (2001) suggested the following steps to teach reading comprehension strategies effectively:

a) ‘Teachers must care about the processes involved in reading and studying, and must be willing to devote instructional time to them through direct strategy-instruction and modeling.

b) Teachers must do task analyses of strategies to be taught. In other words, teachers must think about how a particular strategy is best applied and in what contexts. Teachers can observe students as they are reading in order to determine students’ strengths and weaknesses in terms of strategy use, which in turn will help in providing effective and appropriate strategy instruction.
c) Teachers must present strategies as applicable to texts and tasks in more than one content domain so that strategies can be applied in a variety of reading situations and contexts.
d) Teachers must teach strategies over an entire year, not just in a single lesson or unit allowing strategic instruction to permeate the curriculum.
e) Teachers must provide students with opportunities to practice strategies they have been taught.
f) Teachers must be prepared to let students teach each other about reading and the studying process. He also adds that the only way classrooms will become arenas for extensive strategy instruction is for such instruction to be wholly intertwined with content areas’ (p.19).

Explicit instruction thus requires a teacher modeling and providing a description of the specific strategies which learners are learning, providing guided practice and feedback on the application of the strategies, and encouraging independent practice to apply the strategies. As the initial step the teacher should elaborate the definition of the strategy, and then she should model the strategy with different texts. Pearson & Gallagher (2007) suggest that teachers can instruct comprehension strategies if they define them carefully and model, for students, methods they can use to complete activities, provide a lot of guided practice, provide feedback, and then permit students to practice the strategies independently. Learning in reading strategy instruction is established through the repetition of instructional explanation, guided practice, corrective feedback, autonomous practice and application. The last step is practicing the learned strategy as a whole class, in small groups, and individually. The teacher is around to give a hand to the learners whenever they ask, or have a question. After a few sessions, everyone in the class should be able to apply the strategies independently on their own.

To sum up, explicit instruction can help students to read independently, strategically, and can create readers who are in control of their reading, are purposeful, and understand what they read. Explicit instruction involves clearly explaining the strategy, modeling it and talking about how it works and where and why to use it in the pre, while and post reading phases. Explicit instruction of reading comprehension strategies makes the
readers aware of text organization, and motivates students to read independently. It makes students cognitively aware of their thinking process. Good readers use specific strategies as they engage with text which helps them to support and repair comprehension of the text (Ballou, 2012).

2.5. Meta-cognitive awareness in reading comprehension

‘Meta-cognitive knowledge is what one knows about cognition’ (Schraw & Moshman, 1995, p. 352). ‘There are six attributes that appear differentiate strategies from other human actions, specifically, strategies can be understood as procedural, purposeful, effortful, willful, essential, and facilitative in nature’ (Alexander, Graham, & Harris, 1998, p. 130). When reading a text, the reader has to intentionally use these strategies to accomplish the task. There is a growing interest among EFL teachers, and scholars that EFL learners need better academic preparation in classes regarding using of reading comprehension skills. However, current approaches to teaching EFL still consider reading as a means of acquiring vocabulary, grammatical structures and rules rather than as a process of acquiring meaning from a text. This section deals with meta-cognitive awareness in relation to reading, its definition, report of research, and its effect on reading comprehension in EFL contexts.

The term meta-cognition is mostly associated with John Flavell (1979). ‘Meta-cognition or ‘thinking about thinking’ involves the awareness and regulation of thinking processes. Meta-cognitive strategies are those strategies that require students to think about their own thinking as they engage in academic tasks psychology’ (Çubukçu, 2008, p. 83). Meta-cognition is an important concept in education. People are involved with meta-cognitive activities and use them to supervise their cognitive activities in routine life. Meta-cognition is higher order thinking process that supervises the cognitive processes involved in learning. Activities such as programming how to run a given learning task, monitoring comprehension of a reading task, assessing development of the task and finalizing it are meta-cognitive activities in nature (Livingston, 1997).

‘Meta-cognitive regulation is the monitoring of one’s cognition and includes planning activities, awareness of comprehension and task performance, and evaluation of
the efficacy of monitoring processes and strategies’ (Lai, 2011, p. 1). Magogwe (2013) says that ‘the reader uses meta-cognitive knowledge and evokes conscious and deliberate strategies to comprehend the text’ (p.1). Research by Wichadee (2011), Tengku and Maarof (2012), Hong-nam and Page (2014), Zhang (2001), Alhaqban and Riazi (2012), Garner (1987), shows that there is a connection between readers’ meta-cognitive awareness of reading procedure and their ability to read successfully. However, Fan (2009) writes that ‘meta-cognition and reading strategies have largely been neglected within the context of EFL reading’ (2009, p. 14). In the same vein, Zahedi and Dorrimanesh (2008) point out that ‘in general, there is little strategy training taking place at present, especially for EFL students, and the training that is taking place is blind training’ (p.172).

Although the research shows that there is less attention paid to teaching meta-cognitive and cognitive strategies in the context of EFL and specially Iran, results of research by Rouhi, Davaribina, and Mohammadi (2013) show that the highest rate of academic achievement in participants of their study is accountable to making use of meta-cognitive strategies. In this study Rouhi, Davaribina, and Mohammadi (2013) studied the role of learning strategies on the students’ academic achievement. Analysis of data revealed that 34 percent of variance for achievement of English language learners in their academic courses could be on account of employment of learning strategies such as: rehearsal, elaboration, organization, critical thinking, and meta-cognitive self-regulation. Interestingly, the result of data analysis showed that among rehearsal, elaboration, meta-cognitive self-regulation, organization, and critical thinking, meta-cognitive self-regulation is accountable for the highest rate of contribution to academic achievement of the participants of the study.

Meta-cognitive and cognitive knowledge are the required foundations to becoming a successful language learner. Research shows that good language learners have a clear and operationalized meta-cognitive awareness about their abilities, which in turn assists them in understanding the types of cognitive tasks facing them, and doing them successfully (Dhib-Henia, 2003; Ahari, Poorabdollahi Sheshkelani & Assadi Aidinlou, 2012; Takallo, 2011).
2.5.1. Meta-cognitive awareness and reading comprehension

Meta-cognitive awareness of reading strategies provides three different kinds of knowledge for the learners. The first is declarative knowledge, which ‘refers to what is known in a propositional manner. For example, a student might know that topic familiarity and prior knowledge influence reading speed and comprehension or that rereading facilitates memory. Procedural knowledge refers to an awareness of processes of thinking. For example, a student could know how to skim, how to use context, how to underline, how to summarize, or how to find the main idea while reading. Conditional knowledge refers to an awareness of the conditions that influence learning such as why strategies are effective, when they should be applied and when they are appropriate’ (Jacobs & Paris, 2011, p. 259) (Emphasis mine).

Meta-cognitive awareness pushes the readers to deliberately think about the way they read and what they do before, during and after the act of reading. ‘The reader uses meta-cognitive knowledge and evokes conscious and deliberate strategies to comprehend the text’ (Magogwe, 2013, p. 1). As the readers evoke their cognitive abilities, they start to employ meta-cognitive strategies to control and monitor their cognition and cognitive strategies. Readers who have learned to employ their meta-cognitive strategies efficiently have higher self-efficacy which helps them to use cognitive strategies more successfully. According to Paris and Jacobs (1984) ‘Skilled readers often engage in deliberate activities that require plentiful thinking, flexible strategies, and periodic self-monitoring. They think about topics, look forward and backward in the passage and check their own understanding as they read’ (p. 2083).

Several studies have reported on the benefits of using meta-cognitive strategies for reading in EFL contexts. For example, Salataci and Akyel (2002) report on a study in which they investigated the effects of meta-cognitive strategies teaching on Turkish learners’ comprehension of both Turkish and English language. The results showed that explicit teaching of the meta-cognitive strategies increased use of cognitive strategies (e.g., skimming for main ideas, predicting, and summarizing) in reading in both languages.
Cubukcu (2008) conducted a study in which he instructed Turkish students in meta-cognitive awareness for reading comprehension. The study tried to investigate the effect of systematic explicit instruction of multiple meta-cognitive strategies. It was revealed that systematic direct instruction in meta-cognitive language learning strategies could develop reading comprehension. Tavakoli and Koosha (2016) conducted a research study that examined the impact of explicit meta-cognitive strategy instruction on reading comprehension and self-efficacy in English as a foreign language (EFL) among university students in Iran. The results of study showed that the participants of the experimental group had outperformed the control group in both reading comprehension and self-efficacy criteria.

To sum up, meta-cognitive awareness is an important aspect of reading comprehension, and allows readers to use reading strategies to improve reading skills. ‘Students without meta-cognitive approaches are essentially learners without direction or opportunity to review their progress, accomplishments, and future learning directions’ (OMalley et al., 1985, p. 561). Research has demonstrated that being aware of meta-cognitive awareness will help readers to plan different stages of their reading, decide on effectiveness of strategy application and evaluate their own reading skills.

2.6. Problems in reading comprehension

‘Reading is the primary source of language input for most of EFL learners since they are living in a context in which English is not spoken. They mostly start learning English through reading books, texts, articles, etc. Considering the great importance of reading for EFL learners, knowing about what constitute reading skill and what can end in difficulty for EFL learners in the course of reading a text deem to be crucial’ (Tavakoli, & Kheirzadeh, 2012, p. 147). In the EFL context, foreign language is taught in official (government-funded classes) or non-official (private cases in institutes) classes in communities and does not usually have a social or institutional role in these communities. In such contexts, learners have very little exposure to reading texts and reading practice, which leads to problems of both comprehension and reading speed. Reading in a foreign
language is particularly difficult because to understand texts in another language, readers need to:

a) Decode what they read, using their knowledge of the vocabulary, grammar, and syntactical structures of the language to organize and interpret the written message efficiently.

b) Keep the information in working memory to be processed for further use, and make connections between what they read and what they already know.

c) Think critically about what they have read.

Paris, Lipson, and Wixson (1983) state that strategic readers deliberately make use of particular actions to monitor their understanding of the text; they also know when there is a need to use particular trouble-shooting strategies to repair comprehension failures when it is required. On the contrary, poor readers usually do not monitor their reading, and they do not evaluate and regulate their understanding of the text either (Paris, & Myers, 1981).

In order to help poor readers, it is important to understand why and where their difficulties in reading are occurring. Poor readers often fall prey to the misconception that all the meaning of a text lies in the text itself. Most readers think that they can understand a text by making use of their basic linguistic competence such as their knowledge of the vocabulary and grammatical structures of the language. To comprehend a text, however, readers should be able to use the related syntactic, conceptual, and semantic clues along with socio-cultural knowledge. Most EFL teachers think that EFL students’ education is complete when they are taught rules of syntax and given knowledge of vocabulary, and that this automatically enables learners to read. But EFL students with good knowledge of structure and vocabulary still fail to build meaning from a text. ‘The schemata needed for reading comprehension in a second language (L2) are often nonexistent or contain information inaccurate for the L2 setting’ (Aron, 1986, p. 138). Readers should have the appropriate schema to activate it during reading a text. When there is a breakdown in understanding a text two factors contribute to the situation, either the text does not have enough clues to let the reader to employ his or her top-down strategies in order to extract meaning, or the reader does not own the proper schema regarding the subject of the text.
As a result, in both cases the EFL/ESL readers have to face the challenge of texts which usually are overloaded with materials and contents that are either culturally unfamiliar to them or replete with new vocabularies and complex syntax (Carrell & Eisterhold, 1983).

With regard to EFL readers’ difficulty in reading skill, factors contributing to reading comprehension problems in EFL learners have been grouped here into three main categories:

2.6.1 Misunderstanding of the reading process, cognitive and meta-cognitive strategies that promote learning

Lack of strategic processing of text can cause comprehension problems for EFL readers. For instance, when readers do not use reading strategies, they are not able to monitor their progress in comprehension of the text. They become unable to review and reread the difficult parts of the text. Inability to comprehend parts of a text affects the understanding of the whole text, and when poor learners pass over sections without understanding them, they are unable to comprehend a text globally.

Sometimes readers may have some knowledge of reading comprehension strategies, but may not know when and how to use the strategy. Poor reading happens when a reader does not even realize that she does not understand the text. Usually, poor readers do not have a plan for reading a text. It seems that ‘L2 readers can seemingly reach the first stage of the cognitive view (interaction between the text and the reader at word level), but they cannot seem to proceed any further (coherence, macro-structure) and will consequently encounter comprehension breakdowns’ (Zoghi, Mustapha, & Mohd Maasum, 2010, p. 440). It seems that these kinds of readers have the knowledge to decode meaning and understand the structure of the sentences. However, their problem arises from lack of strategy use.

It thus seems that problems with reading comprehension of EFL/ESL readers are either due to lack of word knowledge or inability to integrate word knowledge to bigger chunks such as sentences and paragraphs which rises from lack of strategy and skills employment during reading a text. Chia (2001) reported that he often received complaints from his students that they understood words of text, its structure and sentences, yet they
had a difficulty in grasping the main idea or the meaning of a paragraph as a whole. Davoudi & Yousefi (2015) believe that the case with such cases is that poor readers process a text word by word and mostly focus on structure and word level interpretation of the text whereas good readers try to find a meaningful connection between elements of the text. Research by Chamot and El-Dinary (1999) on children’s learning strategies shows that proficient readers use, to a great extent, background knowledge strategies such as inferencing, elaborations, and predictions. Less proficient readers mostly use phonetic decoding strategies.

Carrell (1989) believes that ‘too often students in second language reading programmes, who receive instruction only in the skills or strategies, fail to use them intelligently and on their own volition because they do not appreciate the reasons why such strategies are useful nor do they understand where and when to use them. Adding instruction in “awareness” or knowledge about a strategy’s evaluation, rationale, and utility should greatly increase the positive outcomes of instruction.’ (p.129)

Strategy instruction can help the learners to improve meta-cognitive awareness in using reading comprehension strategies. Moreover, it can bring a more positive change to students’ attitudes and motivation towards reading in a foreign language. But it seems that there is a need to change attitudes of teachers, learners, teacher educators and administrative in Iran to operationalize explicit teaching of reading comprehension strategies nationwide and across the educational system of country.

2.6.1.1 Schema activation

Schemata or prior knowledge refers to those set of individual experiences, reflections, conceptual thoughts, attitudes, values, and skills which a reader brings to the reading of a text. Prior knowledge plays a supportive role in comprehending a written message (Keshavarz, Atai & Ahmadi, 2007). ‘Research in native (English) and nonnative (ESL) reading comprehension has shown that the ability to understand texts is based not only on the readers’ linguistic knowledge but also on general knowledge of the world and the extent to which that knowledge is activated during processing’ (Carrell, 1983, p. 183).
Wallace (2001) states that readers use top-down processing to relate their background knowledge to the topic of the text at hand. In other words, readers integrate their knowledge of world to the text-based knowledge of the text. ‘Proficient learners build on and activate their background knowledge before reading, writing, speaking, or listening; poor learners begin without thinking’ (Irvin et al., 1996, p. 10). Schema activation works to familiarize learners with the content of a reading text, helping them learn to think about the text before reading, to enhance comprehension. Previewing a text has also been found to help learners predict and hypothesize what a text is about, based on their own experiences or textual clues. In addition, the previewing strategy helps the reader set a goal for reading and consequently makes them read the text with more focus. Research has proved the relationship of schema activation and its crucial effect on understanding a text.

It is easier for students to comprehend the passage if they have background knowledge about it. ‘It is believed that when students are familiar with the topic, they are able to process it much better.’ (Bilokcuoglu, 2015, p. 2) Chen and Graves (1995) studied the impact of previewing and background knowledge of Taiwanese college student’s comprehension of American short stories. The results showed that the use of a combined treatment - previewing and providing background knowledge - helped the subjects to understand the stories better. The results of the above studies show that background knowledge has a significant effect on learning of new information.

However, Maghsoudi (2012) warns that ‘the schemata needed for reading comprehension in a second language are often non-existent or contain inaccurate information in L2 settings’ (p. 197). Yin (1985) affirms that despite the very important role of schema activation, it is often neglected in analysis of reading texts. The problem is compounded in EFL contexts, where books and other reading materials in EFL countries are usually imported to the country’s educational system. These books are written in the West and are culturally loaded with topics about life, values, food customs, and religions which are unfamiliar to most of EFL readers.
2.6.1.2 Summarization

Another factor that contributes to EFL learners’ problems in reading comprehension can be classified as lack of using summarization strategy in reading classes. Dole, Duffy, Roehler, and Pearson (1991) say that ‘often confused with determining importance, summarizing is a broader, more synthetic activity for which determining importance is a necessary, but not sufficient, condition. The ability to summarize information requires readers to sift through large units of text, differentiate important from unimportant ideas, and then synthesize those ideas and create a new coherent text that stands for, by substantive criteria, the original’ (p. 244).

Summarizing ‘considers the ability to construct (meaning) from one’s reading and understanding of the gist of a text.’ (Xu, Carifio, & Dagostino, 2013, p. 331) A summary contains only the most important points. Summarizing strategies helps learners in all reading because the overall goal of any reading is to understand the most important points. Teaching summarization strategy to the students will help them to improve understanding of a text. ‘Research suggests that instruction and practice in summarizing not only improves students’ ability to summarize text, but also their overall comprehension of text content’ (Duke & Pearson, 2002, p. 221). Researchers have developed practical methods for teaching summarization strategy to the learners. Duke and Pearson (2002), for instance, suggest the following procedure for summarization of a text which is extracted from work of (McNeil & Donant, 1982; Brown, Campione & Day, 1981; Kintsch & Van Dijk, 1978).

‘Rule 1: Delete unnecessary material.
Rule 2: Delete redundant material.
Rule 3: Compose a word to replace a list of items.
Rule 4: Compose a word to replace individual parts of an action.
Rule 5: Select a topic sentence.
Rule 6: Invent a topic sentence if one is not available’ (p. 221).

Nezami (2012) says ‘research suggests that instruction and practice in summarizing not only improves students’ ability to summarize a text, but also their overall comprehension of text content’ (p. 309). Summarizing a passage, a paragraph, or an extract from the text is a difficult task. Students must read through the text and sift important ideas.
from unimportant ones, pick out the important items and synthesize these to create a new concise text that summarizes the original one. The skill of summarization is not shaped overnight; learners need to review and practice the technique as they face increasingly challenging texts. A good situation for enhancement of the strategy is the one that creates an opportunity for learners to practice summarization activities in each reading session.

To sum up, ‘Teaching students how to write summaries is a task that many teachers view with distaste and even trepidation. Some view it as boring to teach and tedious to grade, so they avoid both as far as possible. However, if teachers become aware of the numerous advantages for students, and of effective methods of teaching it, they might be persuaded to embrace summarization as a crucial skill that their students should practice as often as possible, as part of an integrated reading and writing programme’ (Karbalaei, & Rajyashre, 2019, p. 42).

2.6.1.3 Skimming and scanning

‘Working on skimming and scanning skills is a means of helping students break the habit of reading all texts carefully, regardless of their reading purpose, and gradually become flexible readers, that is, readers who are able to adapt their speed to their reading purpose. These skills are often used in the real world, for example, when we read the classifieds in search of a given piece of information or when we quickly go through a text to get a general idea of its meaning and decide if it is worth reading in detail’ (Teixeira, 2012, p. 17). ‘Skimming is defined as getting the main idea or gist of a selection quickly and scanning as a high speed search for the answer to a specific question or the location of a specific fact’ (Maxwell, 1973, p. 48).

Fry (2000) explains skimming as very fast reading, in order to get the main idea but not all the details. Skimming is done for various purposes. Readers usually skim to get the gist or main idea of the text. People also skim a text when they have a lot of material to cover in a limited time. Sometimes people skim a text to see if it is interesting or not.

Skimming involves leaving out unnecessary details. Mostly readers leave out three-quarters of a paragraph to skim read. Skim reading is done when a reader does not require understanding everything in a text. By skimming a text, learners understand around 50 % of
what they read. Another feature of skimming is that it involves speed reading – usually reading twice as fast as the average reading speed. Through skimming readers can obtain the main idea of a paragraph and the important points. Finally, readers skim read a text because they usually do not have much time to go through the whole text. Skimming is identifying the main ideas of a text quickly and it is done at a speed faster than normal reading.

Fry (2000) defines scanning as reading skill that readers use to locate a single fact, particular piece of information without reading every part of a paragraph. Maxwell (1973) defines scanning as a high speed search for the answer to a specific question or the location of a specific fact (p.48). Finding a phone number in telephone directory or reviewing a newspaper listing TV programmes is an example of scanning for information. Accuracy and fast reading are main features of scanning. Scanning is a technique of quick reading done to locate particular or specific information in a text. One of the problems of poor reading efficiency is the lack of familiarity with skimming and scanning techniques. Research shows that learners who have learned to skim and scan a text have higher levels of comprehension.

Maxwell (1973) says ‘that it is not easy to persuade the learners to use skimming and scanning since both the instructors and the learners have biased attitudes against the mentioned strategies’ (p.47). She suggests that the resistance for change in reading behaviour originates from the habit of reading every word and reciting material. There is a fear on the part of the readers that if they skim, they may miss crucial information in the process. She also says that one important factor contributing to the problem is that learners think that they have to read every single word in the text to get the meaning. She proposes that teachers should remind the learners that not every word in the sentence carries essential meaning, and most of them just help the writer to elaborate the writing style. Result of studies by her reveals that skilled readers can get the meaning by choosing as few as two or three words from each paragraph. She believes that changing the learners and the teachers’ attitude is an important factor in this regard and learners should be pushed to practice the strategies under time constraints.
2.6.1.4 Inference

Literal comprehension is understanding the stated meaning of the passage from the words, facts, dates, and places. An inference is an extracted meaning which is not stated clearly in the text (Norvig, 1987). Making an inference is a cognitive process – a thinking process that uses generalization, reasoning and explanation of the typical events and setting to go a step beyond the text meaning (Hammadou, 1991). Drawing inferences requires much more than a literal comprehension of the text. It can be difficult since responses to the questions are drawn from materials which are not directly presented in the text, personal experiences and intuitions. Readers are required to make inferences and predictions during reading and after reading (Day & Park, 2005). The problem of inference is triggered when readers of a text come across the issue of making decisions with regard to implied message in a text. Readers need a great amount of general information to make inferences about the text. Readers have to recognize the words of the passage, decide and cluster them into string of sentences, find out the clear meaning of each sentence, and in addition, produce inferences about the implied meaning of each sentence, and the implicit link between sentences.

It is widely agreed by researchers (Shimizu, 2005; Jafarigohar & Morshedian, 2014; Chikalanga, 1992; Kern, 1989) that making inferences during reading is essential for successful reading comprehension. Readers use inference strategy to comprehend a text when they face problems in understanding a part in a text. Inference plays an essential role in memory and discourse of comprehension. ‘Many of the inferences made in discourse comprehension are schema driven’ (Van Dijk & Kintsch, 1983, p. 48). Inference is critical analysis of a text. In reading, inference means activation of relevant background knowledge for prediction. Poor inference is a factor contributing to reading problems in EFL learners. Poor inference skills could result from inadequate background knowledge, lack of contextual vocabulary, semantic knowledge, or unsophisticated prediction. Block and Duffy (2008) say ‘comprehension is a strategic process; that is, good readers proactively search for meaning as they read, using text cues and their background knowledge in combination to generate predictions, to monitor those predictions, to re-predict when necessary, and generally to construct a representation of the authors meaning’ (p. 21). All
this is part of the ability to infer meaning from a text, i.e., to be able to understand what may be implied, but not overtly stated, in the text.

In a study Nahatame (2014) investigated strategic processing and predictive inference generation in L2 reading. Participants of this study, a group of university students, studied some short narrative passages. The study was designed in such a way to trigger predictive inferences after reception of instruction. The participants were supposed to understand the texts and predict the effects of the events explained. The analysis of responses given by the participants revealed that inferences were produced only when guidelines supported prediction. Moreover, the promotion result of guidelines was noticeable among readers with higher L2 proficiency. The outcomes of recall tasks revealed that readers’ understanding of explicit passage knowledge was not weakened by concentration of attention on implicit predictive knowledge.

Nation (2001) affirms that inferring meaning from the context is an important strategy which needs to be taught in ESL/EFL classes. He also adds that it is worth spending time on vocabulary if it provides a chance to improve vocabulary strategies such as inferring meaning from the context.

The problem of most of EFL readers is that most of the time the context of the text does not help them to infer the meaning of the new words from its surrounding words. Research results by Frantzen, (2003) and Nassaji (2003) show that EFL learners make lexical inferences during reading but their inferences are usually incorrect. In other words, they are unable to guess meanings from the context successfully. Frantzen’s research (2013) revealed that the reason could be found in three areas the ‘(a) context itself, (b) the students behaviour, and in a minor way (c) the story’s glossing’ (p.168).

Inference usage in EFL contexts is affected by two factors. Firstly, most teachers, at least in the Iranian EFL context, are not aware of the way in which this strategy can be used to help learners comprehend a text more efficiently; i.e., its efficacy in developing reading comprehension skills. Secondly, those few teachers that have some familiarity with this strategy use it only to generate predictions about the title /topic of the text. Sometimes, illustrations in the text are used as an incentive to encourage learners to make use of inference during reading sessions. It seems that making use of the background knowledge
in making inferences has not been taken into consideration among Iranian English teachers. This is in line with what Azizmohammadi (2013), Soleimani, and Nabizadeh (2012) say: lack of background knowledge related to the topic of the target language is a reason contributing to reading difficulty among Iranian EFL readers.

2.6.2 Complicated syntax and structure in new text

Under this group of factors leading to comprehension problems in EFL learners falls the unfamiliarity of learners with the linguistic system of English. Reading is an interactive process between reader and text, and linguistic differences between the readers L1 and the target language may affect reading efficiency. Duncan and Duncan (1983) state that phonological differences between the readers L1 and L2 constitute some of the causes that make reading difficult. Panos and Ruzic (1983) state that ‘Arabs write through the lines on their paper, from right to left in reading. Moreover, recognition of letters and words, handwritten as well as printed, can be a very deliberate and time-consuming process for the Arabic speaker decoding an unfamiliar alphabet’ (p. 610). Therefore, due to difference of the Arabic alphabet and the Roman alphabet the adjustment to the opposite direction in covering a text becomes an issue.

Research by Bilikoze and Akyel (2014) on EFL reading comprehension, individual differences and text difficulty reveals that EFL readers with limited skill in language spend most of their mental abilities in dealing with linguistic difficulty of the text when they read a complex task. Therefore they are not able to resort to their personal strengths, background knowledge and incentives in reading a text. ‘Text difficulty is found to have an influence on the contribution to L2 reading comprehension of the selected individual-difference variables.’ (Bilikoze & Akyel, 2014, p. 263).

Linguistic complexity can thus affect EFL reading comprehension in many ways. For example, the differences in the phonological and orthographic system of English and EFL learners’ native languages make it difficult for EFL learners in countries such as Iran and Arabic countries to use the strategy of prediction of letter sequences. ‘Readers are very sensitive to the predictability of letter sequences. Letter combinations do not occur unsystematically. In English, for example, combinations like *th, st, br,* and almost any
consonant and vowel pair are more likely to occur than combinations like tf, sr, bm, ae, or ao. The knowledge that readers acquire about these differing probabilities of letter combinations is demonstrated when words containing common letter sequences are more easily identified than those with uncommon sequences’ (Smith, 2004, p. 127). ‘Due to alphabetical differences, EFL learners cannot use this kind of strategies and subsequently the quality and speed of their reading is impaired. Another problem for EFL readers is that in English language spelling doesn’t represent the exact pronunciation, in other words the spelling of words is not a reliable guide to their sound’ (smith, 2004, p. 128).

The linguistic complexity of a text may be an indicator of two characteristics of the script: syntax and meaning. Simple sentences are not difficult for EFL learners to understand. However, when EFL learners come across complex sentences the comprehension of the text can be expected to be more difficult. ‘Syntax is the primary means by which we can specify the intended relation among words, and syntactic competence is an important dimension of linguistic competence in general’ (Adams, 1971, p. 16). ‘Words usually do not come in isolation in natural texts, and their combination into larger units is governed by the syntax of the language (Lyons, 1981). Readers need syntactic knowledge to construct an interpretation of what they read’ (in Lin, 2002, p. 173).

Text structure (cause and effect, chronological order of events, description of the events of text, compare, and contrast) can also affect EFL readers’ comprehension. Text structure includes the organization of the text i.e. the way in which the whole text, its chapters or pieces of connected text, are organized. ‘Certain more highly structured English rhetorical patterns are more facilitative of recall for non-native readers.’ (Carrel, 1984, p. 441) ‘The results indicate that training on the top-level rhetorical organization of expository texts significantly increased the amount of information that 25 intermediate-level ESL students could recall.’ (Carrel, 1985, p. 727)

Elmianvari and Kheyrebadi (2013) studied instruction of structure of text among Iranian EFL learners and its impact on their comprehension ability. The philosophy behind this research was that learners who already have knowledge of text organization and its structure will use it as an asset to decode the text more properly. They presented training to experimental group with rhetorical structure of the text. The result of study showed that
participants in experimental group outperformed the control group in multiple choices reading comprehension test. This result implies that knowledge of text structure promoted their comprehension of the text. Therefore, the explicit teaching of text structure is an effective tool to help EFL readers overcome the inherent difficulty of reading in a foreign language for EFL readers.

2.6.3 Inadequate linguistic competence of EFL learners for practicing reading skills

2.6.3.1 Vocabulary

Vocabulary knowledge is one of the most important factors contributing to successful ESL/EFL language learning (Laufer & Goldstein, 2004; Saville-Troike, 1984). Knowledge of vocabulary is an essential predictor of reading ability and comprehension of the texts in second language learning (Rouhi & Mousapour Negari, 2013).

‘Having to struggle with reading because of unknown words will obviously affect comprehension and take pleasure out of reading.’ (Alderson, 2000, p. 35) Research result by Liu and Nation (1985) concludes that it is easier to guess meaning of verbs than nouns, adverbs and adjectives respectively. It also revealed that guessing meaning of words in a low density context (1 out of 25) is easier than in a high density (1 out of 10) context.

English is not the medium of education and social interaction in EFL contexts. ‘Reading comprehension is the most important source for L2 learners in EFL academic setting. [So] language learners receive little natural exposure to the target language outside their course materials’ (Shatalebi, Zarei, 2010, p. 277). Therefore, for foreign language learners in countries such as Iran, reading is usually seen as a means of mastering new vocabulary and grammatical structures. In EFL contexts, learners who do not have a suitable range of vocabulary or who do not use effective word-learning strategies often have problems with comprehension of new texts. For these readers, reading is a frustrating exercise of continually looking up words in a dictionary. Due to lack of word knowledge, they find it difficult to understand what they read, and usually avoid reading on their own. The frequent stops to decode words also cause the reader to slow down and many times this disrupts their thought process. Knowing the meanings of a good number of words has an advantage for readers: it allows them enough time and opportunity to recognize words by
sight and recall their meaning from memory, something referred to as sight vocabulary. Sight word reading is said to happen automatically, without the influence of intention or choice. The amount of learners’ sight vocabulary knowledge is directly related to the success of their reading comprehension.

Pazhakh and Soltani (2014) believe that there is a problem with English language vocabulary learning among Iranian learners which affects their reading skill. Most of Iranian EFL learners acquire vocabulary in a passive mood because of following reasons. First, the techniques that teachers use to teach them English vocabulary and pronunciation are boring and mostly grammar translation oriented. In the process of learning new vocabulary, the learners sit idle, and only listen and sometimes repeat after the teacher. So, the flow of learning new vocabulary is always from the teacher towards the learners. Usually, Iranian EFL learners are not risk takers, therefore, they prefer not to apply the learned vocabulary in their conversations or writings.

Fraser (2007) research on reading rate of L1 and L2 revealed that L2 learners read slower in L2 than in L1. As L2 learners read, they encounter unfamiliar words which slow their pace and speed of reading, and automatic word recognition. This reading habit of EFL learners forces readers to cast their attention on the meaning of individual words and comprehending the content through discrete items rather than the discourse of the text. Research by Rouhi and Mousapour (2013) has also shown that size and depth of vocabulary knowledge is a strong predictor of reading comprehension success. Also, vocabulary size scores have been used by researchers such as (Alderson, 2000; Read, 2004) to predict status of comprehension in learners. Usually, good readers use the stock of their active and passive vocabulary to draw general conclusions about what they read and decide what points in a text are more important than the immediate information.

Lin (2002) researched the EFL learners’ perception of prior knowledge and its roles in reading comprehension. The results of study showed that EFL learners in China think that English language vocabulary plays an essential function in their reading comprehension. Lin suggests that, although L2 readers can identify English vocabulary, it does not necessitate understanding meaning of the words, so they have to construct their vocabulary and try to automate the process of word identification and word meaning.
Vocabulary learning is an important factor contributing to successful reading in EFL context. Stahl (1983) suggests that ‘The relationship between word knowledge and reading comprehension is one of the best documented relationships in reading research’ (p.33) Researchers such as Bogaards and Laufer (2004) have worked on and distinguished the difference of breadth and depth concept in regard with vocabulary knowledge. ‘Breadth of vocabulary knowledge is defined as the number of words that a person knows’ (Shen, 2008, p. 136). To put it in another way, depth refers to how well a learner knows about a word and breadth refers to the number of words that a learner generally knows.

Farvardin and Koosha (2011) investigated the role of depth and breadth of vocabulary knowledge in Iranian EFL learners’ reading comprehension. Although the results of the study showed that both depth and breadth are important predictors of Iranian EFL readers’ comprehension ability, it was also revealed that vocabulary breadth plays more effective role than depth in reading comprehension performance of Iranian learners. The result of research by Jamalipour, Khomeijani, and Farahani (2015) on vocabulary knowledge of Iranian EFL learners revealed that there is a strong relationship between the vocabulary knowledge and reading performance of EFL and ESL learners. They also suggested that the positive impact of the vocabulary on reading comprehension can be improved by teaching of vocabulary learning strategies in order to produce a method which can be employed by the learners as they read a text.

To sum up, too many unfamiliar words and phrases may restrain learners from inferring meaning, and vocabulary difficulty influences comprehension of the text (Zhang & Annual, 2008). Due to the important role of vocabulary knowledge, EFL teachers would do well to allocate time and energy to help their students to acquire wider and deeper vocabulary knowledge. They need to remind their students that success in language learning is related to a large extent to becoming familiar with the vocabulary of the target language (Rouhi & Mousapour Negari, 2013).

2.6.3.2 Motivation: Intrinsic and extrinsic motivation

‘Intrinsic and extrinsic motivation means that internal or external factors affect learning. Some motivation is based on the internal factors such as needs, interests and
enjoyment. On the other hand, some motivation is based on external factors such as rewarding and punishing and etc. Motivation that stems from intrinsic factors is called intrinsic motivation and the motivation that occurs from external factors is called external motivation.’ (Davatgari Asl & Elyasi Lankaran, 2015, p.181). ‘Motivation is essential to success: that we have to want to do something to succeed at it’ (Harmer, 2001, p. 51).

For most Iranian EFL learners, there is low motivation for learning English. For them, the English language poses many challenges. The sound system and script of English is different from Iranian script. Furthermore, there are not many opportunities of prospective employment in multinational companies where English is used. Following Gardner and Lambert (1959), the field of language learning now accepts that attitudes and motivation influence the success or failure in foreign language learning. Research by Sayadian and Lashkarian (2010), Ghazvinia and Khajehpoura (2011), Ushida, (2005), Dörnyei, (2001), Alshaar (1997) has demonstrated that achievement in a second/foreign language is related to measures of attitudes and motivation.

In EFL situations it is important to find out the underlying factors which affect learners’ motivation and interest in learning English. Teaching a language will not happen effectively if the teachers themselves do not understand the relationship between learning and motivation. Motivation, drive, or in other words, passion, reveals learners wants, goals, and preferences for learning a language. For instance, in Iran, for many EFL learners there are no immediate needs for learning English except appearing in final examinations at schools. Teachers have to find ways to trigger learners’ external and internal motivation for learning a foreign language and use them as a means for teaching English to the learners.

Sayadian and Lashkarian (2010:138) state that classification of motivation for learning a language has two levels: instrumental and integrative. ‘Instrumental motivation refers to using language to get instrumental goals such as getting a job, reading technical texts, translation and etc. People that have this motivation do not have any intrinsic desire to be members of the target society. They are just studying language to meet their needs’ (Davatgari Asl & Elyasi Lankaran, 2015, p. 182). Moreover, instrumental motivation is the learners’ willingness to learn a language for goals such as getting a better job, travel abroad or fulfilling in exams at schools.
‘When a person learns a language in order to be a member of one community, s/he has an integrative motivation. The people who want to migrate from one country to the other one have this motivation. One of the most important aspects of this kind of learning is using language for social interactions. It seems this kind of motivation leads to much more success than the instrumental one’ (Davatgari Asl & Elyasi Lankaran, 2015, p. 182). Integrative motivation is driven by desires to know a new language for assimilating into the target language community. An integrative motivation is ‘motivation of a particular type, characterized by a willingness to be like valued members of the language community’ (Gardner & Lambert, 1959, p. 271).

Dornyei (1990) studied the conceptualizing motivation in foreign language learning. The result of his study revealed the motivation of foreign language learning (FLL) is highly affected by instrumental motives of the learners. Usually learners of FL do not have access to community of FL, so they hardly grow attitudes about people of the target language. Therefore, they become interested to their cultural and academic values. He also concluded that the element of need for achievement is a significant contributor to motivation in FLL. Furthermore, FLL learning like other academic subjects is accomplishment in doing something in life and consists of academic achievements, so learners are driven and motivated by need for achievement in acquiring a new language. Learners may have a combination of both orientations as motivation to learn a foreign language as well.

In a study, Sayadian and Lashkarian (2010) found that many Iranian learners learn English for instrumental reasons, but integrative motivation is also an effective motivational orientation for the Iranian EFL learners as well. Aliakbaria and Monfared (2014) investigated Iranians motivation and belief about English language learning. The findings revealed that participants identified English as the language which is necessary to learn to develop their country. The results also revealed that the participants motives for learning English are instrumental motives rather than integrative.’ The responses of the questionnaire revealed that almost 95% of students agree or strongly agree that English brings them a competitive edge in studying, work, and promotion’ (p. 203).

In Iran, attitudes toward learning English are mixed. Due to lack of direct interaction in society with the target language (cultural, tourists, and English medium
schools) learning English is mostly necessary for academic purposes. In addition, most of the time, learners do not have a clear idea about the reasons of learning another language besides the mother tongue. Therefore, teaching a foreign language in Iran is a challenge and needs a great deal of effort on the part of the teachers and learners. Ghorbani (2008) says that most high school instructors in Iran and particularly pre-university teachers think that the teachers’ main duty is to prepare the students for university entrance exams by making the students translate English texts to Persian. Research’s result by Jafari Laasaki (2012) reveals that the prevalent approach for teaching English in schools is a loose form of Grammar Translation Method (GTM), or in other words, focusing on grammar and vocabulary. Research, however, shows that teachers can have control and affect on the motivation of learners for doing tasks better. According to Sayadian and Lashkarian (2010) ‘Apart from raising Iranian learners’ levels of integrative motivation, teachers can improve the contents, teaching methods, and classroom activities to raise learners interests and motivations in language learning’ (p. 144).

The research suggests that in order to motivate learners to learn English, the following points need to be taken into account:

a) Learners should have a positive attitude toward learning the English language
b) As much as possible the learners should be continuously exposed to the English language
c) Reading programmes should provide active participation of the learners
d) Reading should be slightly challenging, rewarding with immediate and delayed feedback
e) Teachers should help learners to set immediate and distant goals for motivation of the learners
f) In order to motivate learning in students, teachers should create a friendly atmosphere in classroom, and
g) Learners should have access to situations where they are able to use the language as a ‘natural means of communication’ (Littlewood, 1995, p. 58).
2.6.3.3 Fluency and extensive reading

‘There seems to be a consensus regarding the primary components of fluency: (a) accuracy (accuracy refers to the ability to name words correctly in decoding), (b) automaticity in word recognition, and (c) the appropriate use of prosodic features such as stress, pitch, and appropriate text phrasing’ (Kuhn & Stahl, 2013, p. 385). ‘Proficient readers have certain features in common; they not only read accurately, but also their recognition of words is automatic’ (Kuhn & Stahl, 2013, p. 386).

‘Accuracy refers to the ability to name words correctly.’ (Bogan, Bell, 2015, p. 112) Fluency is ‘the ability to read connected text rapidly, smoothly, effortlessly, and automatically with little conscious attention to the mechanics of reading, such as decoding’ (Meyer & Felton, 1999, p. 284). Kazemi, Hosseini, and Kohandani (2013) propose that automaticity promotes fluency in EFL readers reading.

Frequent stops, and reading laboriously in an inefficient manner make it difficult for the reader to connect ideas and use her background knowledge. Reading fluency consists of two features: reading rate and word recognition accuracy. ‘Reading rate is defined as the speed at which oral or silent reading takes place.’ (Richards, 2000, p. 535) Research by (Morris et al., 2012) affirms that reading rate is closely ‘related to automatic word recognition or sight vocabulary. In a reading-for-meaning context, [reading] rate (oral and silent) is an important aspect of developing reading skill’ (p. 62). Slow, labored, and unenthusiastic reading negatively affects the quality of reading comprehension (Rasinski, 2000).

Sight vocabulary is important for developing reading fluency. If learners have a big store of sight vocabulary, they learn to understand the words they encounter immediately and decode words automatically. As a result, they can save these in their short-term memory. If learners are able to see words at a higher frequency, they can remember the meaning of the words spontaneously without much effort. Xhaferi and Xhaferi (2008) say that ‘providing a number of encounters with a word promotes word retention and particularly if the word is learned using different strategies’ (p.75). Automatization enables readers to have different means (strategies) to focus on the overall (global) meaning of the text rather than only decoding words to get meaning. Automaticity in processing a text can
be influenced by factors such as motivation of the reader for reading, tasks proposed by the text, text difficulty (semantic) grammatical structure (syntax), and topic familiarity.

Because fluent readers do not have to concentrate on decoding individual words, they can focus their attention on the global meaning of the text. In other words, fluent readers recognize and comprehend words at the same time. When EFL learners read a new text or a new topic their speed of reading per minute is decreased. This is due to the fact that they have to put more effort and attention on decoding the meanings of individual words. This has been extensively reported in the literature. Chang and Wu (2010) say that ‘for many foreign or second language (L2) learners, reading is performed to obtain meaning from a text, from which vocabulary and grammatical structures are acquired at the same time’ (p. 284). Nation (2005) also asserts that non-native English readers cover texts slower than in their mother tongue language. It is also suggested by him that slow rate of reading, fewer than 100 words per minute, can defect comprehension of the text.

EFL readers often read word by word laboriously and check unfamiliar words as they encounter them, which implies that they lack automaticity of word recognition. By reading in this way, readers cannot focus fully on getting meaning from the text because their attention is on comprehending the text by decoding the word meaning. Moreover, this slow reading gradually forms a habit of reading, leading to poor comprehension; because of this, learners are unable to read for pleasure.

Extensive reading can be effective for both grammatical and vocabulary knowledge. Extensive reading is reading a book or longer passage in a leisurely manner which is less conscious and direct than intensive reading. The intention of extensive reading is to deal in the shortest period of time with a text. It is obviously an easy method of involving the foreign language learner through continuous exposure to a considerable amount of English language. Through extensive reading of matters of interest the lexis and grammatical features will store in the foreign language repertoire of the learner. A successful extensive reading programme supports the learner with graded readers whose linguistic level and subject matter suits the learners’ capabilities. Teachers can encourage their students to read extensively by requiring them to use the library of the school, initiating a library in the class, and organizing sets of titles (Broughton et al., 1980). ‘Extensive reading is reading a
large volume of material with less emphasis on comprehension. [It] can be done outside the
classroom, which is a significant advantage since precious class time can be spent on
aspects where the presence of a teacher is required. Primary intent of ER is having students
read more in order to increase their exposure to syntax, lexis and perhaps culture of the
target language’ (Robb, 2002, p. 146).

It is believed that extensive reading gets its theoretical foundation from Krashen’s
input hypothesis (Krashen, 1985) and pleasure hypothesis (Krashen, 1994). According to
Krashen (1985) ‘humans acquire language in only one way - by understanding messages, or
by receiving comprehensible input. If input is understood, and there is enough of it the
necessary grammar is automatically provided’ (p.2). According to Krashen’s pleasure
hypothesis (1994) ‘those activities that are good for language acquisition are usually
perceived by acquirers as pleasant, while those activities that are not good for language
acquisition are not consistently perceived as pleasant, and are, in fact, often perceived to be
painful’ (p. 299). Given that these hypotheses are working for extensive reading, one
supposes that in extensive reading programmes the EFL learner selects those reading texts
which are relatively close and comprehensible for her linguistic ability, therefore, it will
boost her grammatical and lexical capabilities.

It is believed that strategies such as skimming, inferring, and summarization can be
trained better by practicing on longer texts. Due to lack of time, extensive reading and
specifically longer texts are usually ignored by teachers in EFL classes. Since it is easier to
handle short texts which can be studied in the class, longer texts are prone to get forgotten
in the classroom. Nation (2001) claims that extensive reading is beneficial for many
reasons. He believes that extensive reading can improve learners’ language knowledge
(vocabulary and grammar), and quality of making use of language by the learners. He
asserts that another benefit of extensive reading is that learners find it an individual activity
that can be geared to different learners with different proficiency levels. Moreover, in
extensive reading, readers can choose topics related to their personal preferences. Nation
(2001) also mentions that extensive reading can be targeted on important factors in
language learning, namely, vocabulary growth and fluency development. But he warns that
vocabulary learning by extensive reading will be effective if it is continuous and lets the readers to meet new learned vocabularies more often in their readings.

‘Texts which provide repetition of unknown vocabulary, that is, when EFL students read extensively, they become fluent readers. Students who read a lot develop positive attitudes toward reading and increased motivation to study the foreign language.’ (Day, 2003, p. 1) Grabe (1991) discusses benefits of extensive reading as ‘longer concentrated periods of silent reading build vocabulary and structural awareness, develop automaticity, enhance background knowledge, improve comprehension skills, and promote confidence and motivation. In short, students learn to read by reading.’ (p. 396) Studies on ER report a positive effect of ER on learners’ vocabulary, grammar and reading comprehension (Kit U, 2009). Jarrell (2003) says ‘extensive reading seems to present the most effective way of changing [L2 learners] negative attitude towards reading into a positive one. In the process they also become more autonomous learners’ (p. 204).

Day and Bamford (2002) described 10 features for extensive reading:

1. The reading material is easy.
2. A variety of reading material on a wide range of topics must be available.
3. Learners choose what they want to read.
4. Learners read as much as possible.
5. The purpose of reading is usually related to pleasure, information and general understanding.
6. Reading is its own reward.
7. Reading speed is usually faster rather than slower.
8. Reading is individual and silent.
9. Teachers orient and guide their students.
10. The teacher is a role model of a reader’ (Day and Bamford, 2002, p. 2–6).

Pazhakh and Soltani (2014) studied the relationship of extensive reading and vocabulary improvement in an English language learning institute in Dehdasht in Iran. They used two experimental groups in their study. The analysis of results of upper-intermediate and lower-intermediate groups showed that both groups after extensive reading have developed with regard to vocabulary learning.
To sum up, this section has tried to review problems relating to and contributing towards reading skills in EFL context, which were categorized as a) inadequate linguistic competence of EFL learners for practicing reading skills, b) misunderstanding of the reading process, cognitive and meta-cognitive strategies that promote learning and c) Complicated syntax and structure in new text. The literature on reading problems in English suggests that in order to solve problems of reading comprehension in EFL contexts it is necessary to analyze the learners’ problem and reading materials and also consider pedagogical solutions provided by teachers and administrators. Problems of reading in EFL contexts cannot be solved overnight; they need to be handled through constant practice and supported by training and solid policies.

2.7. The application of reading comprehension strategies to EFL reading

Many language learners in EFL situation consider reading comprehension as the most important skill that should be improved among the other skills. (Richards & Renandya, 2002). As studies on reading in a foreign language have shown, reading is a complex psychological and a linguistic activity. In many EFL contexts reading is one of the most significant learning aims for the learners, so reading classes become very important for the language learners. In foreign language classes, reading is the center of focus and many foreign language learners take reading as their prime goal. They read for pleasure, and career reasons (Richards & Renandya, 2002). The prevalent problems which learners have faced in reading texts have made researchers look for new ways to help the learners to overcome reading comprehension problems.

Researchers such as Aghaie and Zhang, 2012; McNamara, 2010; Zhang and Zhang, 2011 emphasize that reading comprehension strategies should be taught explicitly in EFL / ESL classes and should be applied by the readers as they read a text. Teachers should model reading strategies and skills clearly to the learners, provide means of practical involvement of the learners for employment of these learned strategies in numbers of different texts.

Fan (2009), Zahedi and Dorrimanesh (2008) claim that not only has the role of meta-cognition and reading strategies been neglected within the context of EFL reading,
there has been little strategy training for EFL students. They also regret that whatever training is taking place is blind training rather than focused training. Many researchers have tried to explain the benefits of strategies and explicit teaching of these. ‘Comprehension strategies indicate how readers conceive a task, what textual cues they attend to, how they make sense of what they read, and what they do when they do not understand’ (Block, 1986, p. 465). Janzen (2002) explains the benefits of teaching strategies as these ‘help to improve reading comprehension as well as efficiency in reading. By using strategies, students will be reading in the way that expert readers do. Strategies help readers to process the text actively, to monitor their comprehension, and to connect what they are reading to their own knowledge and to other parts of the text.’ (p. 289) The results of a study by Smith (1967) revealed that good readers used a greater variety of strategies than poor readers. Also, good readers were much better in monitoring process of their comprehension than the poor readers. Moreover, good readers could adapt their strategies to the task type much better than poor readers.

In sum, explicit instruction of reading strategies can enhance learners consciousness about how they use strategies and what strategies they need to use during the reading process (Wright & Brown, 2007; Khezrlou, 2012; Chalak & Nasr Esfahani, 2012), and these are expected to help learners build a positive attitude towards reading. Explicit instruction of reading strategies includes modeling strategic reading conduct, and giving feedback on student strategy use by teachers, which in turn empowers learners with the ability to decide how reading comprehension strategies can be applied to different texts and contexts. Although research studies in ESL reading have now shown the importance of meta-cognitive and cognitive strategies and their application in ESL contexts, research in application of explicit instruction of reading strategies in EFL contexts has received less attention (Kazemi, Hosseini, & Kohandani, 2013).

2.7.1 Ways of classifying reading comprehension strategies

2.7.1.1 Pre-reading strategies

‘Pre-reading activities introduce students to a particular text, elicit or provide appropriate background knowledge, and activate necessary schemata. Previewing a text
with students should arouse their interest and help them approach the text in a more meaningful and purposeful manner as the discussion compels them to think about the situation or points raised in a text. The pre-reading phase helps students define selection criteria for the central theme of a story or the major argument of an essay’ (Adams, 2009, p. 8). Pre-reading strategies include activities like making predictions based on previewing, brainstorming (writing quickly about experiences or feelings related to the topic to make mind - maps), and surveying the text by making questions based on the title, subtitles, and pictures, and activating prior knowledge.

Grabe’s (2009) schema theory ‘assumes that readers have stored in their minds generalized networks of information that reflect common events, scenarios, objects, or locations’ (p.77). When a new concept in a text is received, it triggers the related schema to interpret the new concept and condition to draw inferences in support of comprehension. Prior knowledge or ‘Schemata determine how a person interprets incoming information and furthermore shape how to expect situations or information he or she will encounter. When the incoming information does not match a person’s schemata, he/ she may not understand the information; consequently, it would be difficult to expect what is going to happen next as well’ (Yang, 2008, p. 184).

The results of a study by (Zhaohua, 2004) who investigated the impact of schema on EFL reading comprehension of American documentary narratives showed that using background knowledge had a significant effect on performance of EFL learners in comprehension of American documentary narrative. Also research by (AshrafaZadeh, Mohd Don, & Meshkat, 2015., 2015; Carrell, 1987; Maghsoudi, 2012; & Khosrojerdi, 2013) on the role of prior information reveals that pre-reading strategies help readers to activate their existing knowledge which helps them to interpret the new information in a text. The reason for this schema activation is that texts usually carry information that are not explicit, so the reader has to rely on her existing schemata to make conceivable hunches and guesses about the content of the new text. By activating learners’ schema, teachers not only ask them what they already know about a specific subject, but also help them to understand the connection between what they know and what they are about to read.
Skimming is one pre-reading cognitive strategy that helps learners to activate their schema regarding the text at hand (Ozek & Civelek, 2006). As discussed in previous sections, skimming is fast reading by selecting two or three words in a paragraph, matching them with proper schema and mental set and synthesizing meaning from the text (Maxwell, 1973). Making use of skimming strategy will help readers to go quickly through the passage and have a general idea about it (Teixeira, 2012). By skimming, learners preview the text and familiarize themselves with its content and organization at a faster speed. Teaching skimming involves using parallel strategies such as mind mapping and underlining to improve both reading comprehension and speed. Studies on EFL reading in Iran, however, report that teaching skimming has not been able to impact reading speed. Khosravi (2000) investigated the impact of skimming strategy on Iranian EFL learners reading rate and reading comprehension ability. The data revealed that skimming only helped to improve the reading comprehension of the subjects, but had no effect on their reading rate. Explicit instruction of reading strategies in EFL contexts needs to include activities that help learners understand the importance of speed reading in comprehension.

In a study Medina (2012) investigated the effects of strategy instruction on EFL reading comprehension. He instructed the learners on six strategies, one of which was skimming. The result of the study showed that the learners’ comprehension and self-efficacy has improved; moreover, the learners’ motivation and attitudes with respect to learning a foreign language changed positively.

Nofelia, Sundari, and Sukmaantara (2015) state that the readers either read for information or pleasure, so the readers should set goals as the first step. They believe that learners have limited time to read in the classroom, and most of the time, students read every word in the text as a habit. They suggest that by using scanning and skimming strategies the readers can manage their time and do not have to read the whole text for information. In their study, Nofelia, Sundari, and Sukmaantara (2015) investigated the impact of employment of scanning and skimming strategies on eighth grade learners’ reading comprehension performance of recount passage at SMPN 1 Silo Jember. The data of the study was gathered through interviews with participants, and reading comprehension

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2 A school in Jember, Indonesia
tests. An interview with the teacher showed that he did not teach the skimming and scanning strategies during his reading sessions with the students. After intervention the collected data from the control and the experimental group showed that scores of the experimental group was much higher than the control group. Scanning and skimming strategies seemed to have positively affected the experimental group’s reading comprehension.

In sum, it can be concluded that when students are exposed to skimming strategies, they become aware of their reading process, and can have a better understanding of texts. Moreover, the results of the above mentioned studies demonstrated that reading comprehension ability can be improved by employing skimming strategies.

2.7.2. While-reading strategies

‘While-reading exercises help students develop reading strategies, improve their control of the second language, and decode problematic text passages’ (Adams, 2009, p. 8). While-reading strategies range from self-monitoring, clarifying the text, making predictions, confirming and modifying predictions, asking questions about the text, summarizing parts of the text to guessing meaning of new words from the context, rereading sentences to look for key words and taking notes on important points. While-reading strategies can help students become more fluent readers. Such strategies help the learners to process complex information as they read.

Inferring what the author has implied but not overtly stated in the text is an important while-reading strategy. Inferring is a complex strategy that readers use in combination with strategies such as activating background knowledge and guessing meaning from the context. ‘Inferencing in learning and comprehension [is] the process of arriving at a hypothesis, idea, or judgment on the basis of other knowledge, ideas, or judgments’ (Richards & Schmidt, 2010, p. 279). Inferring in reading is figuring out answers from the facts to which we have access.

Kispal (2008, p 2/3) has classified the most cited types of inferences into seven groups:
a. **Coherence inferences** (also known as text-connecting or inter-sentence inferences). These maintain textual integrity. For example, in the sentence ‘Peter begged his mother to let him go to the party’, the reader would have to realize that the pronouns *his* and *him* refer to Peter.

b. **Elaborative inferences** (also known as gap-filling inferences). These enrich the mental representation of the text, e.g.: Katy dropped the vase. She ran for the dustpan and brush to sweep up the pieces.’ The reader would have to draw upon life experience and general knowledge to realize that the vase broke, to supply the connection between these sentences.

c. **Local inferences.** These create a coherent representation at the local level of sentences and paragraphs. This class of inferences includes: 1. coherence inferences (described above). 2. ‘case structure role assignments’, e.g. ‘Dan stood his bike against the tree.’ The reader needs to realize that the tree is assigned to a location role. 3. Some ‘antecedent causal’ inferences, e.g. ‘He rushed off, leaving his bike unchained.’ The reader would need to infer that Dan was in a hurry and left his bicycle vulnerable to theft.

d. **Global inferences.** These create a coherent representation covering the whole text. The reader needs to infer overarching ideas about the theme, main point or moral of a text by drawing on local pieces of information.

e. **On-line inferences:** inferences drawn automatically during reading.

f. **Off-line inferences:** inferences drawn strategically after reading.

Haastrup (1991) explains lexical inferencing as following: ‘The process of lexical inferencing involves making informed guesses as to the meaning of a word in the light of all available linguistic cues in combination with the learners’ general knowledge of the world, her awareness of the co-text and her relevant linguistic knowledge’ (p. 40). In order to make lexical inferences a reader builds on her guesses from three sources to obtain meaning: contextual cues and linguistic cues: inter-lingual and intra-lingual.

Contextual cues can originate from the knowledge of the reader extracted from the immediate context of the new vocabulary or knowledge of the world, which comes from readers’ beliefs, experiences, ideas, and school of thought that the reader constantly resorts to during reading, to interpret the meaning of new words. Intra-lingual cues refer to the affixes and stem of words of language being learned by the learner, in case of this topic
English language. Inter-lingual cues include the use of other languages, here, particularly; Iranians may use Turkish or Persian language (Albrechtsen, Hastrup, & Henriksen, 2008).

‘Drawing inferences while reading requires willingness to look at the evidence and come to a conclusion that has not been expressed in words’ (Preszler & Hartman, 2006, p. 4). In order to be able to read between the lines readers have to be taught to look for clues in the text. By making use of inference strategy readers can go beyond the surface details to grasp a deeper meaning that is implied or hinted. Good inference drawers establish their inference based on the authors words and not just their own hunches or experience.

Different researchers in EFL context have tried to explore the relationship between inference and language learning. Bagheri and Ghanizadeh, (2016) in a study showed that there is a significant relationship between making inferences and language achievement of Iranian learners. In the same vein, in a study, Ratna (2014) tried to find out which cognitive reading strategies are used most frequently by EFL students in Indonesia. The results revealed that inference and guessing the meaning from the context were two out of four important strategies that most of the learners applied to understand the meaning of the texts.

Riazi and Babaei (2008) studied the effects of lexical inferences of Iranian female learners on their foreign language learning, particularly, their reading skill. The researchers collected data through recording think-aloud performance of the participants during reading the texts and making lexical inferences. The analysis of data revealed that in order to infer meaning of unknown words the elementary learners used inter-lingual, intra-lingual and contextual cues. The advanced and intermediate learners of the study only used contextual cues in inferring meaning of unknown words. The analysis of data also revealed that the most number of correct lexical inferences were made by the advanced learners.

Proficient readers thus use their prior knowledge about a topic and the information they have found in the text to make inferences about the text (Mansouri, 2014; Shatalebi, & Zarei, 2010; Huang, 2009; Demir, 2012). EFL/ESL readers make minimal use of guessing meaning from the context (McKoon & Ratcliff, 1992). Readers of EFL in Saudi, for example, have been found to over-rely on the lexicon for global understanding of the discourse presented in the text. They usually look up meanings of new words using from
the glossary (translated in Arabic) in the text or at the end of the text (Zaid, 2009). Frequent reference to external sources of word meaning disrupts speed of reading, is tiring, ruins the enjoyment of reading, and frustrates the reader. EFL learners can possibly guess the meaning of new words using the context clues in which they appear, i.e. a sentence or a paragraph in which the word to be learned appears (Zaid, 2009; Shokouhi & Askari, 2010; Abdolmanafi rokni, & Niknaqsh, 2013; Shangarfama et al., 2013; Kolahi, Alikhademi, & Kehtari, 2013; Clarke & Nation, 1980; Mart, 2012).

Readers in EFL context usually come across unfamiliar words in the text, so they need to employ compensatory strategies, techniques that ‘make up for limited knowledge such as guessing meaning from the context’ (Oxford, 2002, p. 128). Explicit teaching of guessing meaning from the context can help the learners to manage the reading speed and face fewer problems during reading a text. Zaid (2009) explored the effect of teaching students how to derive word meaning from sentence context, rather than looking them up in the dictionary or asking the teacher for the meaning of new words. The results of his study revealed that teaching Arab learners how to guess meaning from the context was effective and increased their vocabulary building capabilities.

Abdolmanafi rokni and Niknaqsh (2013) studied the effect of context clues on reading comprehension of EFL learners at Golestan University. The study extracted data from participation of 60 female studying English as a general course. They divided the participants to the experimental and the control group. The participants of the experimental group were taught and practiced how to use contextual clues such as cause and effect, synonyms, comparisons, definitions rather than making use of a dictionary. The results of the study showed that the experimental group that received contextual clues instruction had outperformed the control group in posttest and that their performance improved in terms of reading ability.

Kolahi, Alikhademi Azam, and Kehtari (2013) studied the effects of using contextual cues on understanding meaning of unknown vocabulary in reading texts by Iranian EFL learners. This study also tried to find out the relative impact of kind of contextual cues (definitions, antonyms, synonyms, and explanations) on EFL learners’ prediction of unfamiliar words meaning. The study was conducted in Kish institute in
Tehran with participation of intermediate EFL learners. Forty participants were assigned to control and experimental groups. During the intervention, the experimental group was taught techniques of guessing meaning by making use of the contextual clues. For example, they were taught the concept and application of synonyms, antonyms, definitions, clues in the sentences around the unfamiliar word, and examples. The control group did not receive any training. The study also tried to find out the efficacy of each contextual clue. The results revealed that the highest effective contextual clues contributing towards the ability to guess meaning were synonyms, definitions, explanations, and antonyms respectively. Also, analysis of the data of post-test of the control and experimental group showed that employment of contextual clues had significantly helped the participants of the experimental group to do better in comprehension and understanding of unknown words.

Another important strategy used during the while-reading phase is scanning. ‘Scanning is running your eyes quickly over the page to find specific information.’ (Rog, 2012, p. 104) The technique involves allowing the eyes to wander over the passage until the reader locates the particular piece of information. In scanning, readers are aware of what kind of information they are searching for, so they focus only on finding particular details or answers that fit their search.

Khosravi (2000) investigated the impact of scanning on Iranian EFL students’ reading rate and reading comprehension. The study of the collected data revealed that scanning could remarkably enhance the learners both reading rate and reading comprehension ability. Research by Purnama (2012) with the second year students of MTs Negeri Wonosegoro Boyolali tried to find out if teaching scanning strategies can effectively change reading ability of the learners. The result of his study showed that teaching scanning strategy positively and significantly changed the experimental group’s reading ability. Abdelrahman and Bsharah (2014) investigated the effect of skimming and scanning on improvement of reading ability of secondary learners in Jordan. In order to conduct the research the participants were divided into two groups: experimental and control. The experimental group received training but the control group did not. The results in post-test revealed that the learners of the experimental group had done much better in terms of reading comprehension.
It can be concluded from the above research studies that explicit teaching of scanning and guessing meaning strategies improve EFL/ESL learners’ reading ability in while-reading phase. It can also be concluded that the use of context clues is a suitable strategy to improve reading in EFL/ESL learners. It is also suggested to the instructors to take caution in choosing texts, since one should know that in order to use guessing meaning from the context, learners are required to know a great number of words in the immediate vicinity of the unknown word. So, practicing guessing meaning from the context in a text which is loaded with unknown words may not work for the learners and could cause frustrations on the part of the learners.

2.7.3. After-reading strategies

‘The main purpose of post-reading phase is to check for accurate comprehension of the text and address any misunderstandings that the reader may have encountered’ (Tarshaei & Karbalaei, 2015, p. 363). ‘Post reading exercises first check students’ comprehension and then lead students to a deeper analysis of the text, when warranted’ (Adams, 2009, p. 9). In the post-reading phase, readers think about what they have read and try to relate the text to their own knowledge, interests, or views. Post-reading strategies help the students to think about what they have learned and to share what they have learned with their peers and the teacher. Post reading strategies include evaluating the text, asking for feedback from the teacher and peers, summarizing, making an outline and retelling the text in one’s own words.

‘Summaries of texts are used to tell us something about what has been understood and what has been remembered from the texts. Efficient summarizers streamline the information as they summarize… (so) that the summary product becomes the text which is stored and retrieved’ (Garner, 2014, p. 279). Summarization activities can improve reading comprehension. Summarizing is a challenging cognitive strategy, and it involves restating the intended meaning of a writer in one’s own words. ‘If a reader has the ability to reduce a text to its main points, he or she is considered to have a good grasp of the reading material. This ability involves recognizing and eliminating unnecessary information.’ (Cho, 2012, p. 9) ‘The benefit of using students’ summary writing for reading is that teachers can better
understand their ‘students reading processes and successes or difficulties. .. (It also helps) the reader to see the source texts in more focused ways and minimize the frustration caused by trying to grasp a long and complicated text as a whole’ (Hirleva, 2004, p. 91).

In a study, Hemmati and Kashi (2013) investigated the effect of explicit teaching of summary writing on EFL learners in Iran. The result revealed that summary writing increased the comprehension ability of the participants of the study. Teaching summarizing strategy requires a teacher to instruct the learners on strategies and techniques such as mind-mapping, note-taking, underlining, and distinguishing main idea from supporting ones. Zafarghandi, Rezapour, and Kavishahi (2016) studied the impact of summarization and mind mapping strategies on EFL upper-intermediate learners’ reading ability in Iran. They designed an experimental research study which used three groups, two experimental (one group received explicit teaching of summarization and the other one mind mapping), while the control group received traditional way of teaching the strategies. The results revealed that both the experimental groups (summarization and mind mapping) scored significantly better than the control group. Moreover, the mean score of summarization group was higher than mind mapping group i.e. those who received explicit teaching of summarization strategy outperformed those who received explicit teaching of mind mapping strategies in the post-test. Khoshsima and Rezacian Tiyar (2014) studied the effects of explicit teaching of summarizing strategies to Iranian intermediate EFL students. There were 50 intermediate level participants in the study from Maritime University in Chabahar, Iran. They were divided into one experimental and one control group. The experimental group learned how to write paragraphs, practiced process writing, and were taught different summarization strategies. The researchers used the following model to explicitly instruct summarization strategy to the experimental group.

1. ‘Preparation phase.
2. Presentation.
3. Practice the strategy with familiar tasks.
4. Monitoring and evaluating their ‘strategy use immediately after each practice.
5. Expansion, students should learn to transfer learned strategies to new tasks and combine strategies into clusters.
6. Finally, assessment that teacher assesses students’ use of strategies and its impact on their performance’ (p. 267).

The control group did not receive explicit instruction of summarization strategies. They were taught only a basic format for writing paragraphs independently. The comparison of mean scores of experimental and control group revealed that the experimental group had significantly outperformed the control group in the post-test. It was concluded from this study that explicit teaching of summarization strategy can positively contribute to improvement of reading ability in Iranian EFL learners.

To sum up, research in the context of the EFL/ESL reveals that explicit teaching of reading comprehension strategies can have positive impact on comprehension of the text for EFL and ESL learners. Explicit instruction of the strategies can enhance learners’ consciousness about how they use strategies and what strategies they need to use during the process of reading. Reading strategies can be applied in pre-reading, while reading, and post reading phases. Each phase has particular strategies the application of which can make reading easier and more interesting.

2.8. Review of studies on explicit teaching of reading comprehension strategies
In this section, we review fourteen studies on the explicit teaching of reading strategies in English that have been conducted in EFL teaching contexts.

Jamshidi and Yazdani Moghaddam (2013) investigated whether the awareness of reading comprehension strategies and instructing reading strategies have any effect on Iranian EFL learners motivation and their comprehension abilities. The target population of this study was 62 female learners at intermediate level. The participants were randomly divided into an experimental and a control group. The experimental group was introduced to reading strategies while the reading texts were taught without strategy instruction to the control group. The researchers report that participants in the experimental group made significant progress in their posttest with respect to motivation. The result of this study indicated that the treatment (use of reading strategies) had a positive impact on the motivation of experimental group which led them to improve their proficiency.
In a study, Fatehi Rad (2011) investigated the role of reading strategy awareness on reading comprehension performance of Iranian EFL learners. She particularly studied the relationship between reading performance and reading strategy awareness of successful and unsuccessful readers. According to her research results, ‘there was a difference between the performance of those who were aware of reading strategies and of those who received no treatment’ Fatehi Rad (2011, p. 2). This points to the fact that awareness of strategies aids reading comprehension.

Pakzadian and Rasekh (2012) in their research studied the effectiveness of using summarization strategies by EFL learners for comprehending English texts in distance mode in the Payam Noor University, Iran. In their study, they investigated whether using summarization strategies at undergraduate level had any impact on the reading comprehension performance of students. They write: ‘It is already known that for being effective readers we need explicit strategy training and it is generally agreed that well-developed reading comprehension ability is the key to students’ academic success. This comprehension ability is not a passive state which one possesses, but is an active mental process which needs to be nurtured and improved.’ (Pakzadian & Rasekh, 2012, p. 118) In this study, Pakzadian & Rasekh (ibid) point out that teachers were not willing to teach summarization strategies in their classes because they viewed it as boring to teach and tedious to grade, and avoided it. The researchers, however, believed that if teachers found out the advantages of summarization strategies for students, and learnt practical methods of teaching it, they might be convinced to teach summarization as a strategy that their students could use in their reading programme. The researchers believed that teachers should explain and regularly model ways of summarizing texts with different lengths and contents to help students improve their strategy application, as summary writing helps learners revisit the ideas in the text, put them together, analyze and recreate the text in their own words.

Forty participant (20 male and 20 female) EFL undergraduates, studying at Payam Noor University, Isfahan, Iran contributed to the study. The participants were aged between 18 and 24 and the average age for the group was 21. The researchers used a personal questionnaire to choose participants that had passed the same courses prior to their
participation in this study. The TOEFL scores of the participants were also taken into account and the participants were pegged at low intermediate level with regard to their English proficiency.

In this study, the intervention was conducted in six main stages follows:

a) The teacher defined the concept of summarization strategy explicitly.

b) She modeled how to use this strategy for learners and reminded them about the advantages of using the strategy.

c) The teacher gave explicit instructions for summarization strategy use. Then the students started practicing what the teacher had modeled earlier on various texts.

d) The teacher encouraged independent use of summarization strategy on the part of students. She also tried to scaffold students’ use of strategy until they became independent.

e) The students were then given the chance to evaluate and monitor their own strategy use after each practice session with the teacher.

f) The students were asked to apply this strategy to new tasks.

Results of data analyses show that there was a statistically significant difference (t = 4.23) between students’ performance before the treatment and after the explicit instruction of summarization strategy. In terms of gender, there was no significant difference between males and females performance after summarization strategy. The results of this study support the idea that for improving reading comprehension, summarization is an important tool. The researchers concluded that this improvement in performance of the participants of their study was due to the meta-cognitive awareness that the students had obtained during the act of summarization.

Pakzadian and Rasekh (2012) also report on two other studies on reading strategies. The first study, Graham and Herbert (2010) investigated the reciprocal relationship between reading and writing to find out if writing activities have an impact on reading activities. The result revealed that making students write about what they have read would improve their reading abilities. Pakzadian and Rasekh (ibid) believe that teaching summarization strategy explicitly and training students will help them to be better, more efficient and critical readers. This will provide readers the scope to paraphrase information in their own words instead of just copying them. The result of this study is in line with the findings of Wittrock.
and Alesandrini (1990) that summarizing texts helps learners not only connect information in a text, but also connects the new information to the learners’ prior knowledge. In the same vein Bean and Steenwyk (1984) suggest that summarization instruction has an essential impact on students’ performance in reading comprehension of the texts.

In their study Amiryousefi, Dastjerdi and Tavakoli (2012) investigated the reading strategies commonly used by Iranian EAP (English for Academic Purposes) students. They also investigated participants’ perceptions of the components of EAP reading. They designed a questionnaire based on the classifications of reading strategies and administered it to 170 EAP students at Isfahan University of Technology. In addition, a survey question was designed to elicit participants’ ideas about main EAP reading components. The results showed that both bottom-up and top-down strategies were used by the participants of the study. More interestingly, the participants used more bottom-up strategies in their reading.

As discussed earlier in this chapter, bottom-up strategies focus on form rather than meaning. Amiryousefi, Dastjerdi and Tavakoli (2012), believe that prevalent educational practices in Iran, the books and the teachers, lead the Iranian English learners to pay close attention to word-level clues i.e. morphology and syntax than the meaning. So, Iranian students consider form more important than meaning. ‘The results also show that topical knowledge and genre are important factors for EAP reading tasks. These two components are either ignored or marginalized in the existing models of reading comprehension’ [in Iran] (p.1177). The researcher concludes that Iranian EAP students’ tendency to focus on form is due to the fact of the way which Farsi books are prepared and taught in Iranian schools.

The results of Amiryousefi, Dastjerdi, and Tavakoli’s (2012) study reveal that participants were aware of the text type, and used their schema to understand the text better. They focused on concepts such as coherence, topic sentence, introduction and conclusion in the text, and used the strategy of asking questions of the text. The participants also believed that vocabulary, topical knowledge and genre, structure and reading techniques and strategies are the key factors necessary in getting information from the text. According to these findings, Amiryousefi, Dastjerdi, and Tavakoli’s (ibid) suggest the following important criteria for teaching EAP reading texts to Iranian learners:
a) Learners should have a good repertoire of vocabulary to be familiar with grammar and structures of English.
b) Learners should have some information about the topic of the text.
c) Teachers should try to choose texts based on the students topical knowledge.
d) Teachers should stress specific structures, words, and phrases used in a given text.
e) Teachers should introduce and make students use reading techniques and strategies.
d) Teachers should increase their students’ vocabulary knowledge as much as possible.
e) Learners should be taught how words and structures are combined and used in the text.

Hsu (2006) in a study investigated the reading strategies used by EFL technical students. Hsu picked 41(7 male & 34 female) four-year technical college students in the department of Applied Foreign Languages at Nanya Institute of Technology. All of his subjects had received the same level of training programmes in English courses. The researcher designed a questionnaire which asked for four major different kinds of information: learners’ background, their cognitive and meta-cognitive strategies, and social/affective strategies. He also ran independent samples of t-tests to clarify if there was a significant distinction of reading strategy use for subjects with different sexes, proficiency levels, and overseas experience.

The results of the study revealed that the participants mostly used meta-cognitive strategies and social/affective strategies. Also, female participants used cognitive strategies and social/affective strategies more than males. However, there was no substantial difference between male and female learners regarding overall strategy use. The result shows that good readers were inclined to employ some specific kinds of strategies; moreover, they rated higher range of strategy usage than poor readers did. The findings of the study lead us to what Lau and Chan (2003) say about skilled readers: ‘skilled readers know how to use effective strategies to facilitate the functioning of various cognitive processes and construct meaningful understanding of the text, but poor readers simply read the text word by word without using any strategies’ (p.177).

Soleimani and Hajighani (2013) investigated the effects of reading comprehension strategy teaching in improving the readers’ awareness of reading strategies. They also explored the effect of strategy teaching in extending the rate of strategies that the learners
use and its role on inspiring them to supervise their reading process. The findings of this study, are, however, not very encouraging.

The participants of the study were 90 Iranian pre-university female students. The researchers collected data through a reading comprehension test, a questionnaire, and an interview. Fifty three participants were assigned to an experimental group and were taught reading comprehension strategies during 15 sessions, and the rest of the 37 participants were assigned to a control group and received reading lessons in traditional ways. The findings of the study reveal that strategy instruction raised the experimental group’s awareness of reading strategies and could encourage strategy use by some students, but the experimental group’s performance regarding reading comprehension did not improve significantly. Their research results are in line with the findings of Shang’s study (2010) in which the participants after receiving strategy instruction did not show significant tendency to use strategies in the process of reading comprehension of the texts.

Maghsoudi (2012) studied the claim that readers’ background knowledge (schema) interacts with the content of a reading passage. In her study she investigated if activation of schema had any effect on comprehension of texts which are culturally loaded. She chose 76 students and divided them into control and experimental groups. The students in experimental group received schema activation through pre-reading activities while the control groups were taught in traditional ways. The results revealed that there was a significant difference between the mean scores of pre-test and post-test of the experimental group. The interesting fact is that as the learners received more background information their performance changed more positively i.e. the participants could understand the texts better.

Zaid (2009) in a study investigated the effect of inference strategy on reading comprehension of thirty-four level III students of the College of Languages and Translation in King Khalid University. Using pre and post-test comparison, he found that the intervention was successful in helping the learners to infer vocabulary and meaning from the context. Following Brown and Yule (1983) he defines inferencing ‘as the connections that people establish when they try to interpret texts’ (2009, p. 56). He adds that inferring is ‘related to global understanding of longer pieces of discourse in which context may
exercise an influence in enabling comprehension’ (p. 56). He also adds ‘training on contextualized meaning-guessing can help EFL students to do without English-Arabic vocabulary pairs which are inefficient in learning the vocabulary of the English language’ (p. 57). His belief about guessing meaning from context is strengthened by Clarke and Nation’s (1980) idea that ‘the ability to guess meaning of a word without referring to a dictionary saves time and allows the reader to continue reading without interruption’ (p. 217).

Mehrpour, Sadighi, and Bagheri (2012) investigated the effect of reading strategy instruction in raising learners’ awareness of reading strategies. Participants of the study were 90 female pre university students majoring in Natural Sciences. The researchers used an intervention strategy to teach the participants strategies explicitly. They collected data through a reading comprehension test and two questionnaires, and conducted reviews and interviews regularly with the participants of the study. The findings of the study reveal that teaching strategies explicitly is not an easy job. The result revealed that students’ awareness of reading strategies had risen but some strategies were harder to develop and more difficult for learners to use.

In a study (Hung & Thao, 2014) the researchers write that ‘research has shown that good readers, when encountering comprehension problems, use strategies to scaffold themselves to complete required tasks’ (p. 11). In this study, Hung and Thao investigated effects of meta-cognitive strategy instruction on Vietnamese EFL learners’ reading comprehension. Sixty-four Vietnamese college students participated in this study. The results revealed that after going through a treatment programme the experimental group improved more than the control group. ‘As a result, it suggests that apart from other regular cognitive activities (e.g. scanning, skimming, picking up new words, pre-teaching vocabulary, translating), EFL teachers should direct learners’ attention to meta-cognitive strategies while conducting reading tasks in particular’ (Hung & Thao, 2014, p.11).

Aghaie and Zhang (2012) explored the effects of explicit instruction in cognitive and meta-cognitive reading strategies on Iranian EFL students’ reading performance and strategy transfer. After four month of treatment and strategy instruction, the experimental group showed better results than the control group. Results of the study also revealed that
instruction of the strategy caused the participants to develop autonomous reading behaviours. In order to instruct the learners during the intervention the researchers taught a combination of several strategies in each class session. The researcher believes that it is better to choose a single strategy for instruction in a session, provide lots of examples, individual and whole class practice and then move on to instruction of the next strategy in another session. The researcher believes that each single strategy should be taught and discussed in two, or three separate sessions and after enough practice and making sure that the learners have no problem with use of the new strategy, the teacher should move on to the instruction of another strategy.

Diaz and Laguado (2013) studied improving reading skills through skimming and scanning techniques at a public school. They obtained the information through participants and non-participant observations and semi-structured evaluations. They analyzed the data based on the content analysis proposed by Powell (2003). The results revealed that skimming and scanning could change the participants’ perceptions positively towards reading skill. The researcher believes that a drawback that could be addressed in Diaz and Laguado’s study is ignoring the association of time, skimming and scanning strategy. It is believed that these two important strategies should be considered with the concept of time i.e. learners should be taught to apply these two strategies in short span of time, which has been not mentioned and dealt in this study.

‘Nation (1990) indicated that word guessing from the context is undoubtedly the most significant vocabulary learning strategy.’ (Tavakoli & Hayati, 2011, p. 1228) Tavakoli and Hayati, (2011) in their study tried to investigate the source of knowledge which Iranian EFL learners use as they try to infer the meaning of the new words of a text. This study also tried to find out if there was a connection between learners’ lexical inferencing strategy and their gender. The results of the study revealed that the high-intermediate level learners were more successful than low-intermediate level learners in guessing meaning from the context. They also found that there was no difference between male and female learners in terms of inference strategies which were used by them.

Yousefvand and Lotfi (2011) studied the effect of strategy-based reading instruction on Iranian EFL graduate students’ reading comprehension and their attitudes toward
reading strategies instruction. According to them, using good reading strategies helps the readers to get the maximum benefit from their reading with the minimum effort. They also think that in English classes in Iranian schools, the focus of instruction is on memorizing new words and learning grammatical structures. They believe that only a small number of instructors directly teach students how to use reading comprehension strategies to solve issues in their reading. Forty participants from a university in Isfahan took part in this study. The outcomes of the study suggest that the reading comprehension of the majority of the participants improved, and their attitudes towards reading changed positively.

‘The more EFL learners receive explicit reading strategies instruction, the more they comprehend written texts. We hypothesize that if EFL learners truly understand some effective reading strategies, they will be able to use them more effectively, and apply them appropriately for their meaningful reading comprehension’ (May, 2010, p. iii). In his research May (2010) tried to provoke the reading strategy awareness in third year Lycée ³ learners. The population involved in this study was 272 learners of the third year. The treatment consisted of instruction of the two strategies of skimming and scanning strategies. The results of this study reveal that explicit instruction of reading comprehension strategies is an effective method that could aid EFL students in improving their reading skills. An important finding of this study is that the reaction time of the experimental group was much better than the control group i.e. after reception of intervention the experimental group could apply the skimming and scanning strategy in such a way that saved time. The researcher thinks that the result of this study is in harmony with what he has planned to implement during intervention. As the rest of this thesis will discuss in greater detail, the present researcher has emphasized the concept of time and its effect in raising motivation of readers during instruction of the skimming and scanning strategies.

2.9. Conclusions and discussion of literature review

The process of reading comprehension involves use of some specific factors called strategies. Reading comprehension strategies are significant as they throw light on the method readers use to manage their interaction with written texts and how these strategies

³ Lycée: Saadi Tahar Harath school in Constantine, Algeria
are connected to text comprehension. Strategy awareness helps to improve comprehension as well as efficiency in reading. By using strategies, students can improve their reading ability and become better readers. Teaching students to use reading strategies is found to help teachers become *enablers* rather than *helpers* of learning (Fatehi, 2011). Good readers ‘know how reading works because they have knowledge about how sounds, letters, and print work (‘declarative’ knowledge); they know what strategies to use to help them understand (‘procedural’ knowledge); and they know when to use which strategies (‘conditional’ knowledge’) (Blachowicz, & Ogle, 2008, p. 33).

The studies reported above show that three aspects of reading comprehension strategies have been addressed in the review of the literature. The first category is readers’ strategy use, the second is the effect of strategy use on the performance of the learners, and the third category is motivation, which is a key factor in successful reading. Hong-Nam and Leavell (2006) in their study of language learning strategy use write that the study revealed that ‘students in the intermediate level reported more use of learning strategies than beginning and advanced students’ (p. 399). ESL language learners can use learning strategies more purposefully if they are made aware of LLSs (language learning strategies) (OMalley & al., 1985).

The review of the literature reveals that explicit teaching of reading comprehension strategies in EFL context is an issue worthy of attention. What the studies discussed in this chapter have also revealed is the importance of giving a greater role to self-exploration and participation of learners in learning the strategies, and more stress on the process of training to make learners become independent readers. Moreover, the literature has led the researcher to understand that changes in reading behaviour of the participants should be goal-oriented and sustainable through increased allocation of time on instruction of comprehension strategies and practice.

The findings of these studies are much in line with what researcher had decided to investigate. The studies have also made the researcher believe that true motivation and full engagement of students in different stages of reading strategies use would help to boost students’ self-esteem and independence in reading skills. As Jamshidi and Yazdani Moghaddam (2013) write, ‘guiding learners through the process of reading not only
provides them with the knowledge through which they can become more skilled readers but also motivates them and puts them in control of their learning’ (p.164).

‘Reading strategy instruction, due to its complexity, has rarely been conducted in an EFL context such as Iran.’ (Mehrpour, Bagheri & Sadighi, & 2012, p. 114) Therefore, the area of explicit teaching of reading comprehension strategies still requires further research, especially in an EFL context such as Iran, and the present study intends to explore the issue more deeply by addressing two important variables: the learners’ awareness of reading comprehension strategies, and the learners’ motivation through explicit teaching of reading comprehension strategies. These will be discussed in more detail in the following chapters.